Catalogue no. 81-598-X No. 007
ISSN: 1918-2651
ISBN: 978-1-100-10693-9

Research Paper

National Apprenticeship Survey

Alberta Overview Report

2007

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by **Marinka Ménard,** Statistics Canada
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September 2008

Catalogue no. 81-598-X No. 007
ISSN 1918-2651
ISBN 978-1-100-10693-9
Frequency: Occasional
Ottawa

Cette publication est disponible en français (N° 81-598-X n° 007 au catalogue)

Statistics Canada
Human Resources and Social Development Canada (HRSDC)
Canadian Council of Directors of Apprenticeship (CCDA)

Acronyms

AIT	Agreement on Internal Trade
CCDA	Canadian Council of Directors of Apprenticeship
HRSDC	Human Resources and Social Development Canada
NAS	National Apprenticeship Survey
NATS	National Apprenticed Trades Survey
RAIS	Registered Apprentice Information System

Acknowledgements

The authors wish to thank all those involved in the development and production of the National Apprenticeship Survey at Statistics Canada (STC), Human Resources and Social Development Canada (HRSDC) and the Canadian Council of Directors of Apprenticeship (CCDA).

The assistance of many people was invaluable to the production of this report. Our thanks go to those in the Centre for Education Statistics, Statistics Canada, the Trades and Apprenticeship Division of the Workplace Partnerships Directorate of HRSDC, and the various CCDA jurisdictional representatives for their contributions, feedback and suggestions.

A special thank you is extended to Danielle Baum for her indispensable help in preparing the manuscript and tables for publication, Marcel Mainville, for his indispensable help, and Joseph Prince, Lisa Wilkinson and Suzanne Bélair of the HTML Publication Development Unit, for their help.

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

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Foreword

The National Apprenticeship Survey (NAS) 2007 looks at factors affecting the completion, certification and transition of apprentices to the labour market. It builds on the content and experience gained through two previous surveys on apprentices, the first completed in 1989 and 1990 and the second in 1994 and 1995. The 2007 survey was a collaborative effort on the part of Human Resources and Social Development Canada (HRSDC), apprenticeship authorities in each of the provinces and territories, and Statistics Canada. The work was carried out under the guidance of the Canadian Council of Directors of Apprenticeship (CCDA).

Many academics and various stakeholders contributed to the design of the survey instrument. Most importantly, this report would not have been possible without the 30,000 current and former apprentices who took the time to respond to the survey questionnaire.

Work on the 2007 survey began in 2005. Provincial and territorial governments provided guidance regarding the kind of information to be collected and relevant data concerning apprenticeship registrations in the respective jurisdictions. HRSDC contributed the financial resources to execute the 2007 NAS and, in its capacity as a CCDA member managed the external advisory process necessary for the design of the survey. Statistics Canada provided survey design expertise and administration capabilities to carry out the survey.

This provincial report, along with similar reports that are available for other jurisdictions and for Canada as a whole, form the first group of reports to be published from the 2007 survey data. Topic-specific monographs will form the second series of reports, to be released in 2009. It is hoped that the findings will contribute to the ongoing dialogue by governments, industry and unions to ensure that the apprenticeship systems in Canada continue to respond to the demands of the 21st century.

HRSDC, the CCDA and Statistics Canada wish to thank all who participated in developing and responding to the survey.

Introduction

Skilled tradespeople play an important role in the Canadian economy and are essential to building and maintaining Canada's competitive position in the global knowledge-based economy. Statistics Canada's 2006 census reported that almost 12%[1] of the people in the country's labour force have a background in the skilled trades obtained either through apprenticeship, a trade certificate or a trade diploma. This proportion in Alberta is 12%. Skilled trades workers are present in a wide range of sectors across the country such as automotive repair, construction, transportation, oil and gas extraction, other natural resources development, and the aerospace industry, to name a few. This speaks to the importance of the skilled trade labour force.

Apprenticeship training is the primary method to train Canada's skilled trades workers. It is a well-established method of acquiring skills and gaining knowledge necessary to become a skilled tradesperson through a combination of practical on-the-job training (80%) and intensive in-school technical training (20%). Provinces and territories are responsible for regulating and administering apprenticeship programs and certifying tradespeople. The federal government works together with the provinces and territories through the Canadian Council of Directors of Apprenticeship in supporting the development of a highly-skilled and adaptable workforce in the skilled trades as well as facilitating interprovincial mobility in the trades. In response to the existence of over 200 apprenticeable trades in Canada, the federal, provincial and territorial governments established the Interprovincial Standards Red Seal Program in the mid-1950's. This is a collaborative initiative designed to facilitate interprovincial mobility of skilled trades workers through the harmonisation of trades training requirements and certification based on interprovincial examinations. Today there are 49 skilled trades covered under the Red Seal program and these trades represent over 90% of all apprentices. Industry plays an important role in the delivery and shaping of apprenticeship training across the country, including the Red Seal Program. Learning institutions, unions and private trainers deliver in-school technical training to apprentices, an essential part of apprenticeship systems.

Many years of strong economic growth in Canada have resulted in increased labour market demand for highly skilled and trained tradespeople and Canada's apprenticeship systems have responded. Registration in apprenticeship programs has increased to record levels. In 2005, a total of 245,180 individuals were registered in apprenticeship programs across Canada, an increase of 52% since 2000[2].

Despite an increase in the number of individuals registering in apprenticeship programs, the number of people completing apprenticeship programs each year has changed very little over the past several decades. In 2005, a total of 20,555 individuals completed an apprenticeship program, an increase of only 12% since 2000[3].

There are many reasons why an apprentice may discontinue an apprenticeship program or take longer than average to complete an apprenticeship. In the past, the principal reason apprentices discontinued their programs was a shortage of work. With current labour market conditions, this should no longer be such a major factor.

Added to this issue are the demographic pressures that exist in the skilled trades labour force. The median age of individuals in the trades has been increasing steadily, and the number of retirements is expected to be significant over the next decade. Given the ageing skilled trade labour force and the flat completion numbers, a shortage of workers in the trades in some regions of Canada may develop in the coming years. As well, not all Canadians are participating fully in apprenticeship. Ensuring access to apprenticeship and employment in the skilled trades among Aboriginal peoples, women, visible minorities and foreign-trained skilled trade workers is essential to building and maintaining both apprenticeship and the needs of the Canadian economy.

This suggests that while apprenticeship has served the needs of the Canadian economy well, current apprenticeship systems need to evolve in response to the changing demands of individual apprentices, employers and the knowledge-based economy. This much anticipated 2007 NAS survey provides a glimpse of the motivations that led apprentices to choose careers in the skilled trades and insights into how apprentices perceived their apprenticeship and post-apprenticeship labour market experiences. These are important findings which will contribute to ensuring that the apprenticeship systems in Canada remain strong and robust.

The survey

The 2007 NAS was a telephone survey done by Statistics Canada to gather information on the training and employment experiences of apprentices across Canada. The sample population for the survey was randomly selected from a list of people who were registered as apprentices with their provincial or territorial authorities during the period of 2002 to 2004. A total sample of 67,000 respondents was targeted. Please refer to Appendix 3 for the description of the 2007 NAS survey methodology.

Survey respondents were selected based on apprenticeship status in 2002, 2003 or 2004 as reported by provincial or territorial jurisdictions. The three groups of apprentices were:

- Long-term continuers: people who were still a registered apprentices in 2004 *and* who had been registered apprentices for more than one and a half the prescribed duration time required to complete their apprenticeship programs *and* who had not earned their certification by 2004.
- Completers: people who had been registered apprentices *and* had completed their apprenticeship programs (with or without certification) at some point during 2002 to 2004.
- Discontinuers: people who had been registered apprentices at some point in the past *and* had discontinued their apprenticeship programs between 2002 and 2004.

In the context of the survey itself, respondents confirmed their apprenticeship status by answering a set of screening questions at the beginning of the NAS questionnaire. Their status in 2007 determined the sequence of questions they were subsequently asked.

The screening questions used to categorize respondents were designed to help capture information about the various pathways followed by people pursuing trade

qualifications through apprenticeship programs. While the apprenticeship programs are typically structured with two types of required training (in-class and on-the-job) followed by exams and certification, apprenticeship is a flexible system with many entry points and routes to completion. Some people work in a trade for a number of years before registering and taking their in-class training. Others, who have enough work experience, may challenge the examination *without* registering as apprentices or completing in-class training thus becoming trade qualifier. This accounts for the presence in the survey results of less traditional pathways to become a journeyperson like the discontinuers with certification.

The last apprenticeship survey, the 1995 National Apprenticed Trades Survey (NATS), focused only on two groups of apprentices: "completers," those who had completed their apprenticeship programs; and "discontinuers," those who had dropped out of their programs before completion.

The 2007 survey included additional components and questions designed to address new issues and research topics related to the current context of apprenticeship in Canada. The survey also added a new group of apprentices, "long-term continuers," those who had remained in their programs for one and a half the expected time or longer mainly to try to understand why some apprentices take longer to complete their apprenticeship programs. Thus the survey focused on three groups:

- Long-term continuers,
- Completers – those who completed the program during 2002 to 2004, and
- Discontinuers – those who dropped out of their program during 2002 to 2004.

Expanding on the previous survey, the 2007 NAS aimed to investigate the factors affecting apprentices' completion and certification, and to measure their transition to the labour market. The specific objectives were to better understand:

- why some registered apprentices do not complete their programs,
- how completion affects the labour market outcome of trainees, and
- why some apprentices take much longer than expected to complete their programs.

Between January and May 2007, the survey collected information from the three groups of apprentices. Each group was asked a common set of questions as well as a separate set of questions specific to their situations. The questions focused on the following areas.

- Pre-apprenticeship educational, training, and work experiences
- Experiences concerning technical training and work as an apprentice
- Reasons why discontinuers do not complete their program
- Difficulties encountered during apprenticeship
- Experience with the certification process
- Employment since the apprenticeship program
- General social-demographic characteristics

About half of the 1995 questionnaire content was considered to be still relevant to the current context of apprenticeship programs and was adapted for use in the 2007 NAS. In addition the 2007 survey included a component on apprentice mobility to respond to the emerging issue of apprentices migrating from one jurisdiction to another during or after their programs, and a component to examine the apprenticeship experiences of newcomers to Canada.

For information on the methodology of the survey such as target population, frame and sample design, data accuracy and response rates, please refer to Appendix 3.

Users and purpose of data

The data presented in this report will allow reviewers to compare labour outcomes for discontinuers and completers, identify reasons for interest and obstacles to registration, study barriers to completion by trade, and analyze the perception of the apprentice on their in-class and on-the-job training. It will also help answer questions about the mobility of apprentices during and after their programs.

The CCDA and its members can use the survey data to improve programs and to assist policy formation. Provincial and territorial apprenticeship authorities should be able to use the findings to evaluate their respective programs. In addition the results could be used to monitor factors affecting apprenticeship and to identify topics for future research.

It should be noted that where possible this report mirrors the results presented in the NAS 2007 National overview report. However due to data quality limitations in some sections it is not possible to present results at the provincial level. In these instances results are not summarized in the report but the data quality indicators are summarized in the Appendix 1 Tables.

Section 1

Profile of the apprentices:

Long-term continuers, completers and discontinuers

Change in apprenticeship program status between 2004 and 2007

The nature of the National Apprenticeship Survey provides a unique opportunity to explore the dynamics of apprentice's movement in and out of an apprenticeship program between 2002 and 2007. As mentioned in the Introduction, provincial and territorial administrative data were used to identify three groups of individuals based on their apprenticeship program status as of 2002, 2003 and 2004. These three groups of interest included apprenticeship program completers, long-term continuers and discontinuers, status assigned to the apprentices by the jurisdictional apprenticeship authority. A few years later, in 2007, the NAS collected updated information on the program status for each of these three groups of individuals, based on the self-identification of the apprentice. It was expected that many apprentices would have a different status in 2007 in comparison to their status in 2002, 2003 and 2004. These differences are mostly due to a real change of status between those two periods for the apprentices while some could be due to errors on the administrative records of the apprenticeship authority or by errors in self-identification of their status by the apprentice.

Movement through apprenticeship programs is dynamic and does not necessarily occur in a linear fashion as highlighted in Figure 1.1 (see Appendix 1 Table A.1.1.1).

In Alberta, 64% of long-term continuers as of 2004 had completed their apprenticeship programs by 2007 while 32% were still pursuing their programs. Only 5% had discontinued.

It was expected that completers identified as such by the apprenticeship authority in 2002, 2003 and 2004 were to self-identify themselves as such in 2007. However, even if the majority of the completers (88%) were still in that same group in 2007, 4% self-identified themselves as long-term continuers and 8% as discontinuers. This discrepancy, as explained above, could be due to a mis-identification of their own status by the apprentice or an error on the administrative record.

Of those who had discontinued apprenticeship programs as of 2004, 53% had returned to their programs by 2007, and had either completed them or were still enrolled (23% and 30% respectively). Just fewer than 50% were still discontinuers.

Figure 1.1

Apprentice status in 2002 to 2004 versus 2007, Alberta, National Apprenticeship Survey, 2007

Apprenticeship Status 2000 to 2004			Apprenticeship status in 2007	
Long-term continuers 2002 to 2004	Long-term continuers 2007	32%	With minimum requirements	20%
			Without minimum requirements	12%
	Completers 2007	64%	With certification	62%
			Without certification	2%
	Discontinuers 2007	5%	With certification	3%
			Without certification	2%
Completers 2002 to 2004	Long-term continuers 2007	4%		
	Completers 2007	88%	With certification	86%
	Discontinuers 2007	8%		
Discontinuers 2002 to 2004	Long-term Continuers 2007	30%	With minimum requirements	12%
			Without minimum requirements	18%
	Completers 2007	23%	With certification	9%
			Without certification	14%
	Discontinuers 2007	47%	With certification	3%
			Without certification	44%

The 2007 NAS revealed an important finding with respect to the qualifications of individuals who had discontinued their apprenticeship program as of 2007. In general there are two mechanisms through which individuals can receive trade certification. The most widely used mechanism is to complete an apprenticeship program consisting of on-the-job training and classroom based studies after which time an individual would sit a trade certification examination. Alternatively, it is possible for an individual to sit a trade certification examination without having first completed an apprenticeship program, providing an individual has acquired a significant amount of time working in the trade. The 2007 NAS revealed that, in Alberta, 3% of discontinuers had completed their trade certification. This group represents those who, although not having completed an apprenticeship program, have successfully passed a certification exam qualifying them as journeypersons.

It should be noted that throughout the rest of this report the term discontinuers includes those who discontinued their apprentice program but successfully passed a certificate exam qualifying them as journeypersons.

Profile of long term-continuers, completers and discontinuers

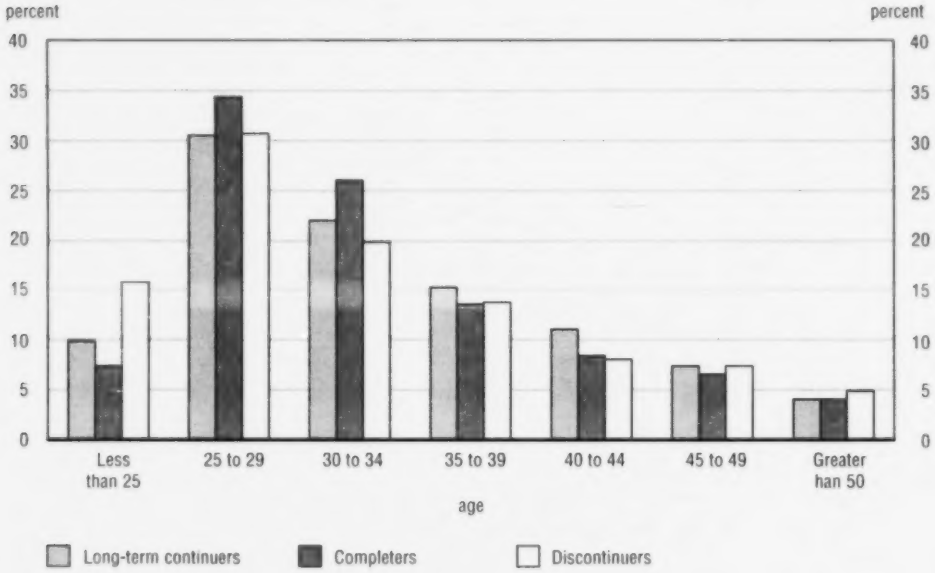
The demographic characteristics for each of the three apprentice groups in Alberta are summarized in Appendix 1 Tables A.1.1.2 to A.1.1.8. Among the three groups of apprentices a "typical apprentice" is male, under 35 years old, non-Aboriginal, non-immigrant, non-visible minority, with no history of disability, and is apprenticing in a Red Seal designated trade. While the three groups are similar in terms of their demographic characteristics, there are some differences.

Age, gender and minority status

The age distribution within the three groups of apprentices is shown in Chart 1.1 (see Appendix 1 Table A.1.1.2). Discontinuers were more likely to be in the youngest age group: more than twice as many discontinuers as completers (16% versus 7%) were under the age of 25. The highest proportion of completers (34%) was between 25 and 29 years of age. Long-term continuers tended to be older: 37% of this group was 35 years of age or older, compared to 33% of completers. The age profile of the three apprentice types is not surprising given that, by definition, long-term continuers spend more time in a program while discontinuers leave their program early.

Chart 1.1

Age distribution by apprentice status, Alberta, National Apprenticeship Survey, 2007



In Alberta, between 9% and 11% of apprentices were female, reflecting the fact that women are underrepresented in apprenticeship programs. The NAS revealed that women apprentices appear to have more success in reaching completion. In Alberta, women represented a relatively higher proportion of completers: 11% compared to 9% of long-term continuers and 10% of discontinuers (see Appendix 1 Table A.1.1.2).

Between 5% and 7% of each apprentice group in Alberta identified themselves as being of Aboriginal descent (see Appendix 1 Table A.1.1.2) comparable to a 8%[4] representation in the province. Immigrant populations were underrepresented; they accounted for between 4% and 7% of each apprenticeship group, compared to 16%[5] of the provincial population. Apprentices that identified themselves as members of visible minorities were similarly underrepresented; they accounted for between 6% and 12% of each apprenticeship group compared to 14%[6] of the population in Alberta.

Province or territory of residence and registration

This section looked at the provinces where respondents were registered as apprentices as of 2002, 2003 and 2004 and where they resided as of 2007. More than 90% of all three apprentice groups registered in Alberta by 2004 remained residents of the province in 2007. By 2007, between 2% and 3% of each apprentice group were residents of Saskatchewan and 2% were residents of British Columbia (see Appendix 1 Table A.1.1.3).

Highest level of education prior to apprenticeship registration

The educational level apprentices reach before they enter apprenticeship programs appears to be related to their program outcomes. The NAS showed that, in general, lower levels of education corresponded with lower proportions of completers. In Alberta, as shown in Chart 1.2 (see Appendix 1 Table A.1.1.5), the pre-registration level of education varied across the apprentice groups. More long-term continuers (22%) than completers (13%) had not finished high school. A slightly higher proportion of completers (56%) than long-term continuers (51%) had finished high school. Overall, a higher proportion of completers than long-term continuers had pursued or completed post-secondary studies (28% versus 23%).

Employment income

The NAS showed that apprentices who completed their programs fared better than long-term continuers or discontinuers in terms of total employment income in the 12 months preceding the survey (referring to 2006) as seen in Appendix 1 Table A.1.1.6. More than 80% of the completers had an annual income equal or higher than the median annual earnings of Albertans in 2005 of $43,964[7], while this proportion is of 64% for discontinuers and 66% for long-term continuers. In Alberta, as shown in Chart 1.3, 83% of completers had employment income of $40,000 or more, 19% earned less than $40,000. By comparison, about 34% of long-term continuers and 36% of discontinuers earned less than $40,000. The highest proportion of long-term continuers (31%) earned between $40,000 and $59,999. The highest proportion of completers (34%) earned more than $80,000 annually.

Chart 1.2

Highest level of education before beginning apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

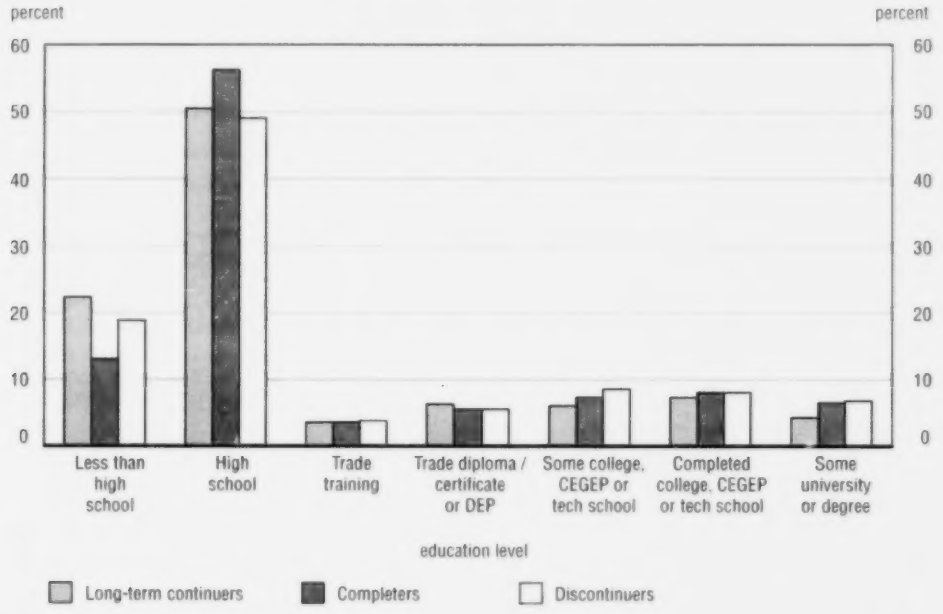
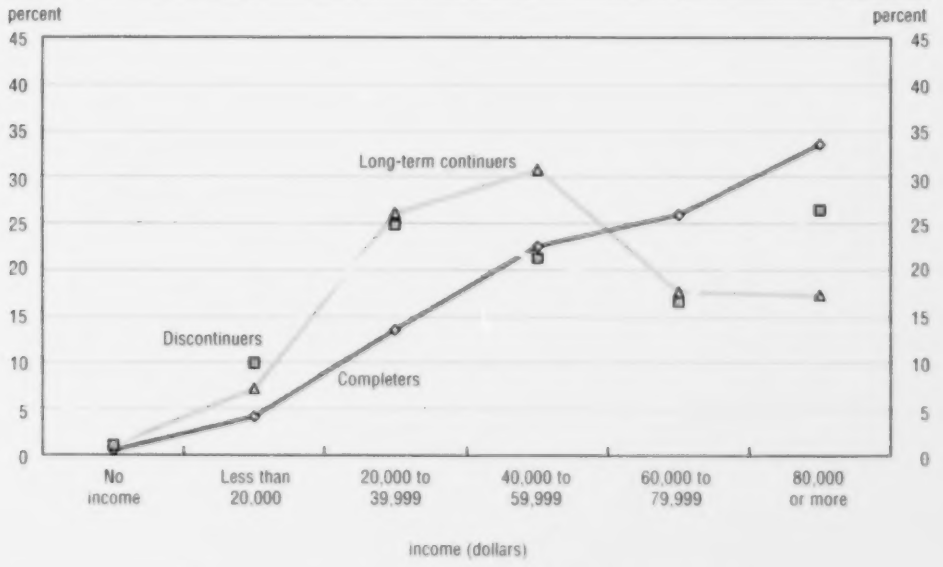


Chart 1.3

Distribution of all the employment income of the last 12 months by apprentice status, Alberta, National Apprenticeship Survey, 2007



Union participation

The data on union participation before, after, and throughout apprenticeship programs is shown in Appendix 1 Table A.1.1.7.1. In Alberta, between 77% and 86% of the three apprentice groups were not union members at any time. Fourteen percent of long-term continuers were union members before staring their apprenticeship programs. While 9% of completers were union members both at the beginning and end of their programs, 3% were members only before starting their programs and 10% became union members only at the end.

The data on the type of union membership of the apprentices *notwithstanding* of the time of their membership is shown in Appendix 1 Table A.1.1.7.2. Across the three groups of apprentices, the largest proportions of apprentices were members of a construction union: 47% of long-term continuers, 43% of completers, and 49% of discontinuers. The next largest proportions in the three groups (24%, 35%, and 32% respectively) were members of industrial unions.

Section 2

Factors influencing interest and registration in apprenticeship trades

The decision to pursue a specific trade may be influenced by one's interest in the trade which can be sparked by a variety of factors. To obtain a better understanding of what sparks interest in trades, the NAS collected information on the main factors that influenced apprentices' interest in their trades. As summarized in Chart 2.1 (see Appendix 1 Table A.1.2.1), the main factors that influenced interest in a trade were similar across apprentice groups in Alberta.

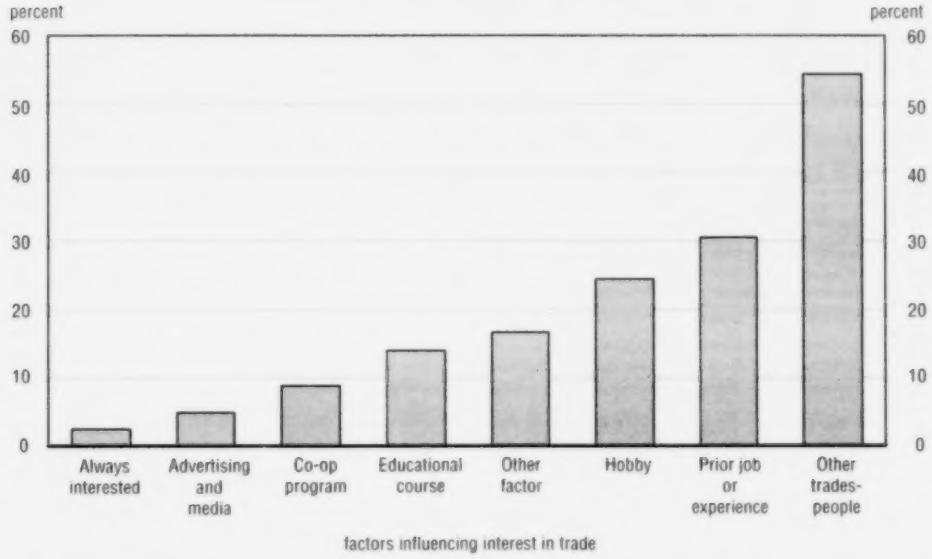
Contact with people exposed to the trade was the most common factor. Slightly over half of each apprenticeship group (between 54% and 55%) reported that family members or friends in the trade, teachers or counsellors, employers, co-workers, union representatives, or other tradespeople influenced their interest in a trade.

The next two most frequently cited factors influencing apprentices' interest in the trade were knowledge of the trade from prior job or work experience, reported by 30% to 31% of each apprentice group followed by a hobby related to the trade, reported by 24% to 26% of each apprentice group.

Between 12% and 16% of each apprentice group became interested in a trade through their high school or post-secondary studies, while an additional 8% to 10% became interested through their high school work experience or co-op programs. Advertising, media campaigns print and on-line information, and job postings were not influential factors, they were reported by only 5% of each group.

Chart 2.1

Main factors influencing interest in the trade for all apprentice groups (average), Alberta, National Apprenticeship Survey, 2007



Reasons to register in the trade

The NAS also collected information on the factors that influenced registration in a trade. The main factors were similar across apprentice groups in Alberta as shown in Chart 2.2 (see Appendix 1 Table A.1.2.2).

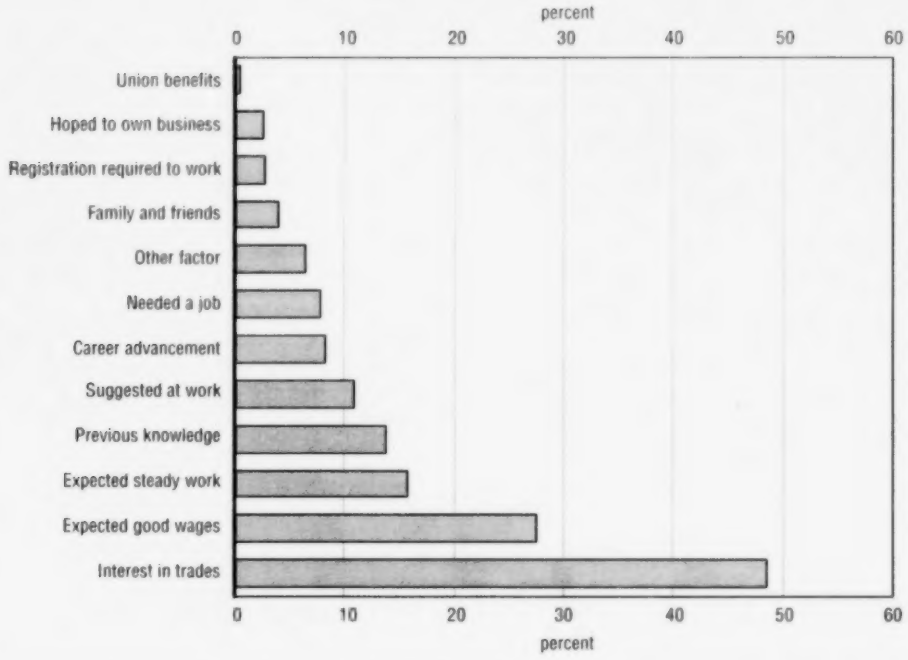
The three most commonly cited factors influencing registration were interest in or enjoyment of the trade, good salary expectations, and job stability or security. Approximately half of each apprentice group (between 48% and 50%) reported registering as apprentices because they enjoyed or liked the work or trade or liked the working conditions. A further 26% to 30% of each apprentice group were influenced by the expectation of good pay, better wages, or a pay increase. Between 15% and 17% of each group registered because they expected steady work or saw career opportunities because of strong demand for that trade.

Between 13% and 14% of apprentices in each group registered because they had prior knowledge, experience, or qualifications in the trade. Between 10% and 12% of respondents in each group registered because of a recommendation from someone at school or on a job.

Union benefits; the hope of owning a business; and a requirement by law, an employer, a union, or by the apprenticeship office were the least cited reasons for registration.

Chart 2.2

Factors influencing registration in a trade for all apprentice groups (average), Alberta, National Apprenticeship Survey, 2007



Prior work done in the trade before registration

The NAS collected information on whether apprentices had trade-related work experience or technical training prior to registering for an apprentice program. As shown in Appendix 1 Table A.1.2.3, the majority of each apprentice group in Alberta had work experience in the trade prior to registration. This proportion was highest for long-term continuers (71%) and slightly lower for completers (66%) and discontinuers (64%).

At least 35% of each apprentice group in Alberta had prior technical training in the trade. This proportion was highest for long-term continuers (41%) and slightly lower for completers (39%) and discontinuers (35%).

Section 3

Challenges, support and difficulties experienced by apprentices

Apprenticeship program completion or discontinuation can be influenced by a variety of factors throughout the stages of the apprenticeship program. This section explores the perspectives of apprentices in Alberta concerning the barriers, challenges, and support received in order to access, maintain, and complete their apprenticeship programs.

Difficulties related to finding employers for first apprenticeship programs

The majority of all three groups of apprentices (82% to 83%) did not encounter difficulties finding an employer for their first apprenticeship programs. Difficulties in finding an employer did not appear to be related to program success or discontinuation overall, since an almost equal proportion of long-term continuers, completers, and discontinuers (17% to18%) reported difficulties (see Appendix 1 Table A.1.3.1.1).

Appendix 1 Table A.1.3.1.2 shows the specific challenges encountered by apprentices who had difficulty finding an employer for their first apprenticeship program. The most common reason for difficulties was a lack of employers hiring. This reason did not appear to impact program success; 40% of completers cited this reason compared with 36% of long-term continuers and 37% of discontinuers.

Lack of work available in the trade, the next most common reason reported, did appear to impact program success, as it was cited by 29% of discontinuers but only 22% of completers and 15% of long-term continuers.

Lack of work experience or knowledge was the third most common reason reported. This reason did not appear to impact program success since 21% of completers cited this reason compared with 15% of discontinuers and 13% of long-term continuers.

Discrimination was encountered by 8% of long-term continuers. Only 3% of completers reported encountering this difficulty.

Challenges or obstacles encountered during the apprenticeship program

Almost all apprentices across the three apprentice groups indicated that they encountered an obstacle during their apprenticeship program. As shown in Appendix 1 Table A.1.3.2, obstacles relating to insufficient income, inconsistent work or lack of work, program costs, employers, and the apprenticeship system were the most frequently cited, while obstacles surrounding transportation, supervision by a journeyperson, injury, and family or personal problems were not widely reported.

Several obstacles that were commonly reported did not appear to be related to program discontinuation. Among the three apprentice groups, the most commonly cited obstacle encountered during apprenticeship training was insufficient income or delays in funding, including employment insurance payments and training allowances. However, it did not appear that this obstacle impeded success since it was reported by a higher percentage of completers (55%) than long-term continuers (53%) and discontinuers (37%).

Similarly, program costs (such as costs of tools and books, tuition fees, the lack of tool allowances, and non-tax-deductible costs) were cited as an obstacle but did not appear to impede program success; 26% of completers reported this as a barrier compared with 22% of long-term continuers and 20% of discontinuers. In addition, 20% of completers and 25% of long-term continuers but only 19% of discontinuers reported that their employers did not follow rules, cancelled apprenticeships, or did not give time for technical training.

On the other hand, it did appear that some obstacles may be associated with program discontinuation. Inconsistent work or a lack or work was reported by 25% of discontinuers compared with 18% of program completers. Additionally, a lack of awareness of how the apprenticeship system works, no credits for prior work or technical training, and problems with the apprenticeship board and programs (including paperwork, administration, communication, lack of information, cancellation, and lack of classes) were reported by 22% of discontinuers and 25% of long-term continuers compared with 17% of completers.

Moreover, 13% of discontinuers and 19% of long-term continuers reported that the technical training, on-the-job training, or examination was too difficult, inappropriate, or did not reflect the course material or reality. Only 10% of completers cited this obstacle. And while 13% of discontinuers and 14% of long-term continuers reported sexual harassment, discrimination, or problems with co-workers, employers, or their unions, only 9% of completers cited these obstacles.

Help received other than training allowances and employment insurance

Almost all (99%) of apprentices received some form of help other than training allowances and employment insurance during their training. Among the types of help received (see Appendix 1 Table A.1.3.3), the most commonly cited was wages or other financial assistance during technical training sessions, whether from the employer, union, government, apprenticeship board, or Aboriginal band council. Twenty-eight percent of completers received this type of support compared with 22% of long-term continuers and 15% of discontinuers.

Across all apprentice groups the next most frequently reported type of help received was wages above the legally stipulated minimum for apprentices. This was cited by 21% of long-term continuers, 20% of discontinuers, and 19% of completers.

The next two most frequently reported types of help were transportation, parking, and travel expenses, cited by 7% to 10% of apprentices, followed by housing, accommodation, meal, and living allowances, cited by 7% to 9% of apprentices.

Between 3% and 7% of apprentices reported living with parents or receiving financial support from family and friends as a form of help received.

Change in employers during the apprenticeship program

The proportion of apprentices who changed employers during their programs was highest for long-term continuers (60%) and lowest for discontinuers (36%). About half (53%) of completers changed employers during their apprenticeship programs (see Appendix 1 Table A.1.3.4.1).

Appendix 1 Table A.1.3.4.2 shows that the reasons for changing employers were similar across all three apprentice groups. The most common reason was that work was no longer available with that employer. About one quarter of apprentices in each of the three groups cited this reason: 28% of discontinuers, 26% of completers, and 23% of long-term continuers.

The next most common reason was to seek better conditions (such as work, income or benefits). Twenty-three percent of long-term continuers, 18% of completers, and 17% of discontinuers cited this reason.

Between 12% and 14% of apprentices in the three groups changed employers to seek a better employer or start a business. Between 9% and 14% of apprentices changed employers to take on new contracts or because the work on their project ended. Another 7% to 14% of apprentices made a change to seek greater experience or better training or advancement opportunities.

Three percent of long-term continuers and 2% of completers cited harassment, discrimination, or conflicts at work as reasons for changing employers.

Main reasons discontinuers did not complete their apprenticeship programs

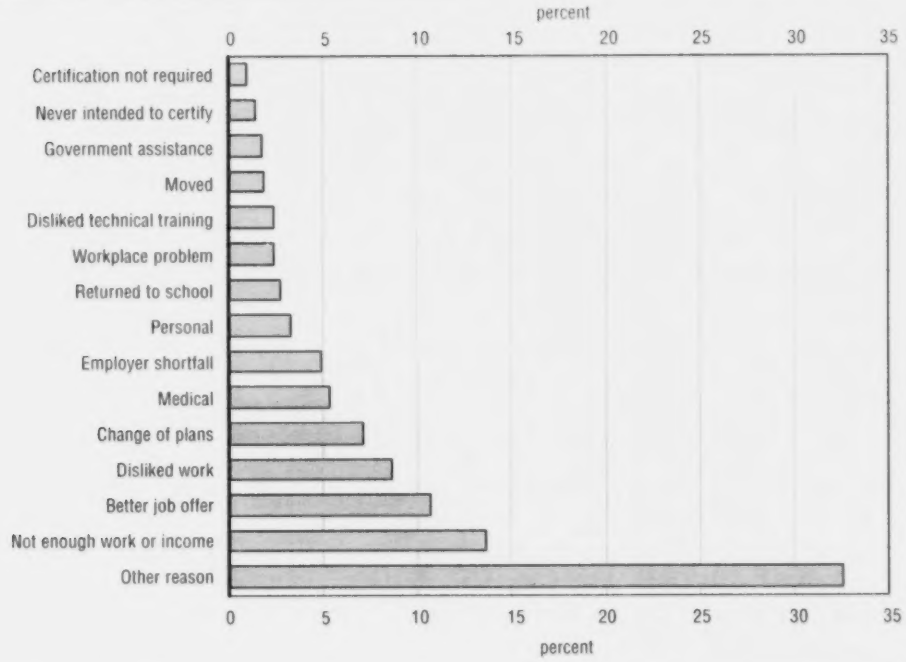
Chart 3.1 (see Appendix 1 Table A.1.3.5) shows that the main reason most often cited by discontinuers for not completing their apprenticeship programs was not enough work or income, reported by 14% of discontinuers. Eleven percent of discontinuers stopped their programs because they received a better job offer, while an additional 9% stopped training because they disliked the work or the working conditions.

Seven percent of apprentices discontinued their programs because they changed or wanted to change jobs or careers, became self-employed, or lost interest, and 5% discontinued their studies due to illness, disability, or medical reasons. Another 5% discontinuers encountered problems with their company, employer, or union, including bankruptcy, closure, relocation, discontinuation of the apprenticeship program, layoff, or the employer not following rules.

Three percent of discontinuers stopped their programs as a result of family issues or personal reasons, or because they returned to school to study in a field unrelated to the trade. Even fewer apprentices discontinued because they disliked or had difficulty with the technical training (2%); moved for an unrelated reason (2%); experienced harassment, discrimination or other conflicts in their programs (2%); or did not receive sufficient government financial assistance (2%).

Chart 3.1

Reasons discontinuers did not complete their apprenticeship program, Alberta, National Apprenticeship Survey 2007



A large proportion of discontinuers reported other reasons for not completing their apprenticeship program. This response category represents an extremely varied and diverse group of reasons that cannot be synthesized into discrete homogonous categories. This suggests that for a large portion of discontinuers the reasons for dropping out are very diverse and personalized.

Section 4

Certification

This section analyzes the certification status of apprentices in the Red Seal trades versus non-Red Seal trades by apprentice status as compiled by NAS.

When registering in an apprenticeship program in any province or territory, apprentices ultimately aim to become journeypersons in their trade. Apprentices must pass an examination to obtain a Provincial or Territorial Certificate of Qualification, also called the "journeyperson's certificate."

To facilitate greater mobility, apprentices may obtain an additional endorsement through the Interprovincial Standards Red Seal Program, which is administered in each province and territory under the guidance of the Canadian Council of Directors of Apprenticeship. The Red Seal endorsement enables journeypersons to practice their trades in any province or territory in Canada. Of the several hundred trades practiced across Canada, 49 are Red Seal designated.

Certification in Red Seal and non-Red Seal trades

Appendix 1 Table A.1.4.1 shows that, in Alberta, 97% of completers and discontinuers were in Red Seal trades. Since the long-term continuers by definition had not yet finished their programs, none were certified and data on their status is not included in this analysis. This section only focuses on completers and discontinuers.

Of the completers, only 9% were without any type of certification. Of the 91% who were certified, 88% were in Red Seal-designated trades: 17% were certified for their own jurisdictions and 71% were certified for their own jurisdictions as well as recognized interprovincially through the Red Seal Program.

A much greater proportion of the discontinuers, 76%, were without any certification. Of the 24% who were certified, 23% were in Red Seal trades: 5% were certified for their own jurisdictions and 18% were certified for their own jurisdictions as well as recognized interprovincially.

Section 5

Labour force and earnings

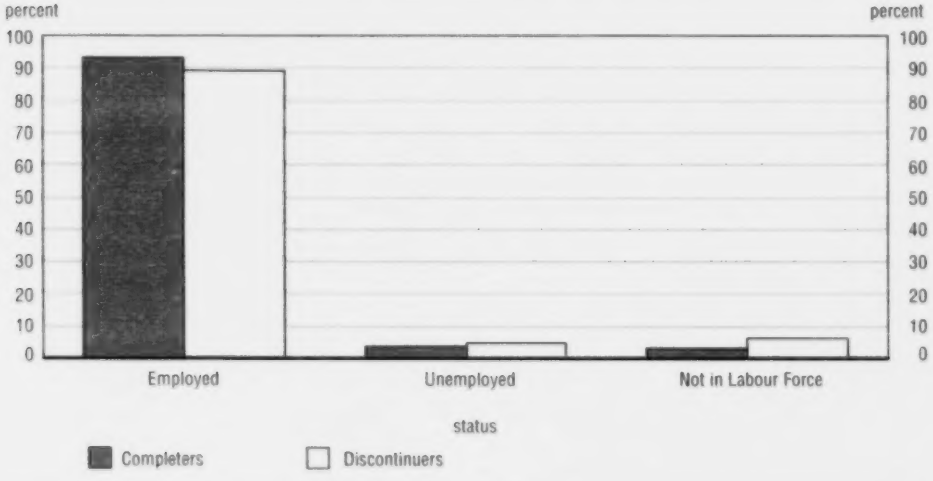
The NAS gathered labour force and employment information on apprenticeship program completers and discontinuers. Apprenticeship program long-term continuers are not included in this section because labour force and earning information was not collected for this group, with the exception for the all employment income for the past 12 months which is presented in Table A.1.1.6 (see Appendix 1) in section 1 of this report.

Completers had better labour market outcomes than discontinuers in terms of both their employment status and their hourly wages.

The NAS found that across Canada, apprentice's who completed their programs were more likely to be employed than those who discontinued. As shown in Chart 5.1 (see Appendix 1 Table A.1.5.1.1), in Alberta, 93% of completers and 89% of discontinuers were employed. Only between 4% and 5% of each group were unemployed. However, twice as many discontinuers as completers were not in the labour force (6% versus 3%).

Chart 5.1

Distribution of labour force status by apprentice status, Alberta, National Apprenticeship Survey 2007

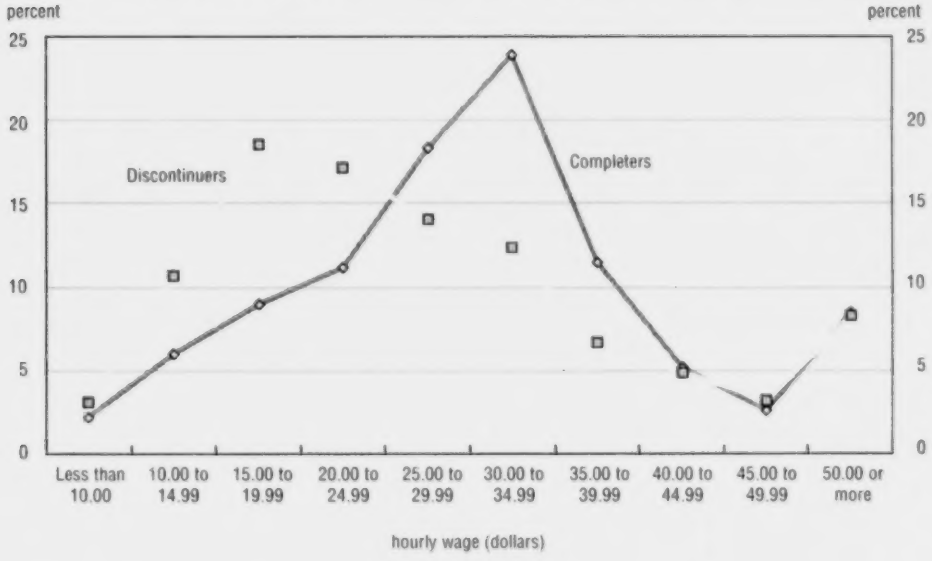


Appendix 1 Table A.1.5.1.2 shows that the proportion of completers and discontinuers who were self-employed or had permanent, temporary or seasonal employment were virtually identical.

Hourly wages

The NAS found that, in general, the average hourly earnings of completers were better than those for discontinuers. Chart 5.2 (see Appendix 1 Table A.1.5.2) shows that in Alberta completers had a clear advantage over discontinuers. Seventy percent of completers but only half of discontinuers earned more than $25 an hour. The largest proportion of completers (24%) earned between $30 and $35 an hour. The largest proportion of discontinuers (19%) earned between $15 and $20 an hour.

Chart 5.2
Distribution of hourly earnings by apprentice status, Alberta, National Apprenticeship Survey 2007



The median hourly earnings of completers and discontinuers also show a difference in how these groups fare. For completers, the median (where half of the completers are above this value and half are under), was $29 an hour while for discontinuers it was $21.43 an hour.

Section 6

Mobility

There is a strong demand for skilled labour in Canadian regions experiencing economic booms such as the Prairie Provinces in their energy and construction sectors. Labour mobility is especially relevant for these regions which need to attract workers from other areas of the country.

Labour mobility refers to the freedom of workers to practice their occupation wherever the opportunities exist in Canada. The Agreement on Internal Trade (AIT) stipulates that any qualified worker in an occupation in one province or territory must be granted access to similar employment opportunities in any other Canadian jurisdiction. The AIT covers both professional occupations and the skilled trades.

The 2007 NAS sought to measure the labour mobility of apprentices between provinces and territories. To study apprenticeship labour mobility, the NAS asked respondents to indicate the province or territory where they lived before registering in their apprenticeship program, the province or territory where they did their apprenticeship training, and the province or territory where completers and discontinuers are currently working.

For the purpose of analysis, Tables A.1.6.1.1, A.1.6.1.2, A.1.6.2.1, A.1.6.2.2, A.1.6.3.1 and A.1.6.3.2 (see Appendix 1) were developed based on Statistics Canada's standard economic regions:

- Atlantic – including Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick
- Québec
- Ontario
- Prairies – including Manitoba, Saskatchewan, and Alberta
- British Columbia
- Territories – including the Yukon Territory, Northwest Territories, and Nunavut

Mobility between province of residence before registration and province of registration

The NAS asked questions to compare the province or territory where apprentices registered to the jurisdiction where they had lived for the previous 12 months or more.

Appendix 1 Table A.1.6.1.1 shows that in Alberta between 9% and 13% of the apprentices in each group moved to register in another jurisdiction while the majority (between 87% and 91%) registered in the province where they had been living.

Appendix 1 Table A.1.6.1.2 shows that, of those who moved, 87% of long-term continuers, 95% of completers, and 93% of discontinuers registered in the Prairie region. About 13% of long-term continuers and 5% of completers indicated that they originally lived outside of Canada and entered the country to register in their programs.

Mobility between province of registration and province of apprenticeship training

The NAS also asked questions to compare the apprentices' province of registration with the province where they did their on-the-job apprenticeship training.

Appendix 1 Tables A.1.6.2.1 and A.1.6.2.2 show that almost all of the apprentices, 94% of long-term continuers, and 98% of completers and discontinuers, did their on-the-job training in the province where they were registered. Of those who moved, 37% of long-term continuers, 48% of completers, and 59% of discontinuers moved within the Prairie region, while 41% of long-term continuers, 36% of completers, and 30% of discontinuers did their on-the-job training in British Columbia.

Mobility between province of registration and current province of work

The NAS also sought to measure the mobility of apprentices who found employment after either completing or discontinuing their apprenticeship programs. The survey asked the completers and discontinuers to indicate where their current job or most recent job was located and compared this with their province of registration.

Appendix 1 Tables A.1.6.3.1 and A.1.6.3.2 show that almost all of the completers and discontinuers found work in their province of registration, 95% and 93% respectively. Of those who moved, 25% of completers and 26% of discontinuers found work in the Prairie region, while 48% of completers and 44% of discontinuers found work in British Columbia.

Section 7

Women, Aboriginal peoples and landed immigrants

Canada's population growth rate has slowed gradually over the past few decades. As a result of this and other demographic trends, Canada faces a long-term reduction in labour force growth particularly in the trades and related job areas. The participation and retention of specific groups such as women, Aboriginal peoples, and landed immigrants have long been a challenge in apprenticeship programs. NAS examined why these groups encounter more hurdles than the apprentice population as a whole.

Apprenticeship pathways

Comparison between women and men

Figure 7.1.1 (see Appendix 1 Table A.1.7.1.1) compares the apprenticeship pathways followed by men and women in Alberta between 2002, 2003 , 2004 and 2007.

The profiles of women and men classified as long-term continuers in 2004 showed a higher completion rate for women. By 2007, 81% of women had completed their apprenticeships compared to 63% of men. Only 16% of women were still in their apprenticeship programs compared to 32% of men.

The profiles of apprentices identified as discontinuers in 2002 to 2004 showed a slightly higher completion rate for women when compared with their male counterparts. By 2007, 26% of women had become completers while 22% of men had completed their programs. Similar proportions of women and men (47% versus 48%) remained discontinuers in 2007.

Comparison between Aboriginal peoples and all other apprentices

Figure 7.1.2 (see Appendix 1 Table A.1.7.1.2) shows the comparison between the apprenticeship pathways of Aboriginal peoples and all others in Alberta in the survey.

The profiles of those classified as long-term continuers in 2004 showed a slightly lower completion rate for Aboriginal peoples. By 2007, 58% of Aboriginal peoples had completed their apprenticeships compared with 64% of all others. A higher proportion of Aboriginal peoples (39%) were still registered in their apprenticeship programs compared with all others (31%).

Figure 7.1.1

Apprentice status in 2002, 2003 and 2004 versus 2007 by gender, Alberta, National Apprenticeship Survey 2007

Apprenticeship Status 2000 to 2004		Apprenticeship status in 2007			
		Women		Men	
Long-term continuers 2002 to 2004	Long-term continuers 2007	16%	Long-term continuers 2007	32%
	Completers 2007	81%	Completers 2007	63%
Completers 2002 to 2004	Completers 2007	87%	Completers 2007	88%
Discontinuers 2002 to 2004	Completers 2007	26%	Completers 2007	22%
	Discontinuers 2007	47%	Discontinuers 2007	48%

The profiles of apprentices who were discontinuers in 2002 to 2004 also showed a lower completion rate for Aboriginal peoples (16%) than for all others (22%) by 2007. In both groups, about half (53% of Aboriginal peoples and 48% of all others) remained discontinuers in 2007.

Comparison between landed immigrants and all other apprentices

Figure 7.1.3 (see Appendix 1 Table A.1.7.1.3) shows the comparison of the apprenticeship pathways between landed immigrants and all others in Alberta in the survey.

The profiles of those classified as long-term continuers in 2004 showed a lower completion rate for landed immigrants. By 2007, only 45% of landed immigrants had completed their apprenticeships compared with 64% of all others. A higher proportion of landed immigrants (55%) were still registered in their apprenticeship programs compared with all others (31%).

The profiles of apprentices who were discontinuers in 2002 to 2004 were very similar. By 2007, 24% of landed immigrants had completed their apprenticeship programs compared with 21% of all other discontinuers. In 2007, fewer landed immigrants than all others (39% versus 49%) were still discontinuers.

Figure 7.1.2

Apprentice status in 2002, 2003 and 2004 versus 2007 by Aboriginal status, Alberta, National Apprenticeship Survey 2007

Apprenticeship Status 2000 to 2004			Apprenticeship status in 2007	
	Aboriginal people		All others	
Long-term continuers 2002 to 2004	Long-term continuers 2007	39%	Long-term continuers 2007	31%
	Completers 2007	58%	Completers 2007	64%
Completers 2002 to 2004	Completers 2007	89%	Completers 2007	88%
Discontinuers 2002 to 2004	Completers 2007	16%	Completers 2007	22%
	Discontinuers 2007	53%	Discontinuers 2007	48%

Figure 7.1.3

Apprentice status in 2002,2003 and 2004 versus 2007 by immigrant status, Alberta, National Apprenticeship Survey 2007

Apprenticeship Status 2000 to 2004			Apprenticeship status in 2007	
	Landed immigrants		All others	
Long-term continuers 2002 to 2004	Long-term continuers 2007	55%	Long-term continuers 2007	31%
	Completers 2007	45%	Completers 2007	64%
Completers 2002 to 2004	Completers 2007	85%	Completers 2007	88%
Discontinuers 2002 to 2004	Completers 2007	24%	Completers 2007	21%
	Discontinuers 2007	39%	Discontinuers 2007	49%

Reasons for discontinuing apprenticeship programs

The issue of why apprentices discontinue their programs of study has long concerned program administrators and policymakers. Many factors influence apprentices. The NAS asked discontinuers from these specific groups about these factors.

Comparison between women and men

The profiles for men and women in Alberta differed in a number of respects related to the main reason for discontinuing their apprenticeship programs. As shown in Appendix 1 Table A.1.7.2.1, 14% of women but only 2% of men said they discontinued their programs because of family issues or personal reasons. About 8% of women but only 2% of men reported harassment, discrimination, dispute, conflict of interest, or not getting along at work as reasons for discontinuing their studies.

A higher proportion of men than women (14% versus 8%) discontinued their programs because of insufficient work or income.

Comparison between Aboriginal peoples and all other apprentices

Comparing the main reasons why Aboriginal peoples in Alberta did not compete apprenticeship programs with the reasons reported by others in the survey revealed a number of differences, as shown in Appendix 1 Table A.1.7.2.2. Nineteen percent of Aboriginal peoples, compared to 13% of all others, said they discontinued their programs because of not enough work or income. About 16% of Aboriginal peoples discontinued their studies because they received a better job offer. Only 10% of all others cited this reason.

Comparison between landed immigrants and all other apprentices

Appendix 1 Table A.1.7.2.3 compares the main reasons why landed immigrants did not complete their apprenticeship programs with reasons cited by other Alberta apprentices in the survey. When compared with others, more than double the percentage of landed immigrants (16% versus 7%) reported that they discontinued their programs because they wanted to or did change jobs or careers, became self-employed or lost interest in the trade.

The NAS sample size was too small to provide quality estimates for comparing landed immigrants and all others related to the other main reasons for non-completion of apprenticeship programs.

Section 8

Quality of Apprenticeship Training

Most apprenticeship programs require registered apprentices to follow a mix of in-class technical training and on-the-job workforce training.

The NAS sought to determine the apprentices' overall satisfaction with their training programs and to link their responses to completion rates and retention rates in the three apprentice groups.

As part of the accreditation process, the journeyperson assigned to supervise an apprentice's work practicum must corroborate the apprentice's on-the-job training and number of hours of work experience completed. The 2007 NAS asked apprentices whether they were supervised during their programs and, if they had no supervision, how long they had worked unsupervised.

On-the-job training

In Alberta, 82% of discontinuers compared with 80% of long-term continuers and 81% of completers reported that they had received supervision at all times during their work terms (see Appendix 1 Table A.1.8.1.1).

Appendix 1 Table A.1.8.1.2 shows that, of the remaining approximately 20%, more than half of discontinuers (51%) compared with 41% of long-term continuers and 45% of completers said they had been without supervision for 2 weeks or less. Slightly more long-term continuers (34%) than completers (33%) and discontinuers (31%) reported spending 15 weeks or more without supervision from an accredited journeyperson.

Appendix 1 Table A.1.8.1.3 shows that between 86% and 88% of the three apprentice groups did not find their journeyperson's explanations too fast. A slightly higher proportion of long-term continuers (14%) than completers (12% and discontinuers (13%) did find the explanations too fast.

Similarly between 86% and 88% did not find the work difficult. A slightly higher proportion of long-term continuers (13%) than completers (12% and discontinuers (11%) did find the work difficult.

Technical training

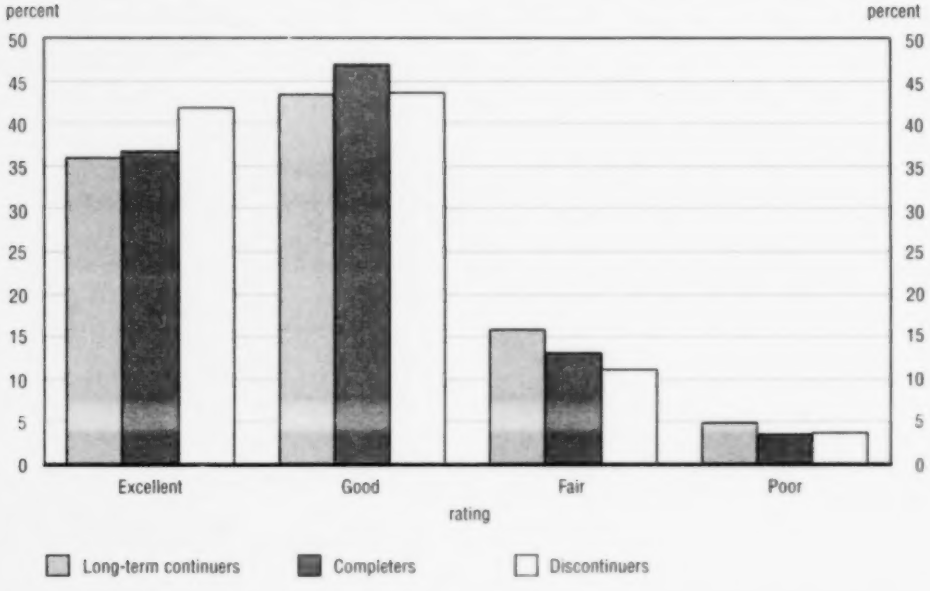
As shown in Chart 8.1 (see Appendix 1 Table A.1.8.2), between 79% and 86% of each group reported that the equipment was good to excellent in terms of being up to date. A higher proportion of long-term continuers (21%) compared with completers (17%) and discontinuers (15%) said the equipment or technology was fair to poor.

Between 53% and 68% had no difficulty understanding written material associated with their training. A higher proportion of long-term continuers (48%) had difficulty compared with completers (28%) and discontinuers (32%).

Between 75% and 89% found the instruction well paced and comprehensible. A higher proportion of long-term continuers (27%) than completers (11%) and discontinuers (21%) said they often got lost because their instructors went too fast.

Chart 8.1

Providing up-to-date equipment or technology for technical training by apprentice status, Alberta, National Apprenticeship Survey 2007



Conclusion

This report has summarized the key finding from the 2007 National Apprenticeship Survey for Alberta. The data presented in this report has provided a profile of apprenticeship program completers, discontinuers and long-term continuers and has provided insight into differences in labour outcomes by apprentice status. It has also shed light on the reasons for interest in apprenticeship and obstacles to registration, on barriers to completion, adequacy of in-class and on-the-job training as well as mobility of apprentices during and after their programs. These results can be used by provincial and territorial apprenticeship authorities to assist policy and to evaluate their respective programs. In addition the results could be used to monitor factors affecting apprenticeship and to identify topics for future research.

Endnotes

1. Statistics Canada. 2007. *Highest level of educational attainment for the population aged 25 to 64, 2006 counts for both sexes, for Canada, provinces and territories - 20% sample data.*

   Education Highlight Tables. 2006 Census. Statistics Canada Catalogue no. 97-560-XWE2006002. Ottawa. Released March 4, 2008. http://www12.statcan.ca/english/census06/data/highlights/education/index.cfm?Lang=E.

2. Statistics Canada, Registered Apprentice Information System (RAIS), 2005.

3. Statistics Canada, Registered Apprentice Information System (RAIS), 2005.

4. Statistics Canada. 2008. Ethnic Origin (247), Single and Multiple Ethnic Origin Responses (3) and Sex (3) for the Population of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census - 20% Sample Data (table). Topic-based tabulation. 2006 Census of Population. Statistics Canada catalogue no. 97-562-XCB2006006. Ottawa. Released April 02, 2008. http://www12.statcan.ca/english/census06/data/topics/Print.cfm?PID=92333&GID=837928&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0 (accessed May 22, 2008).

5. Statistics Canada. 2008. Visible Minority Groups (15), Immigrant Status and Period of Immigration (9), Age Groups (10) and Sex (3) for the Population of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census - 20% Sample Data (table). Topic-based tabulation. 2006 Census of Population. Statistics Canada catalogue no. 97-562-XCB2006011. Ottawa. Released April 02, 2008. http://www12.statcan.ca/english/census06/data/topics/Print.cfm?PID=92338&GID=837928&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0 (accessed May 22, 2008).

6. Statistics Canada. 2008. Visible Minority Groups (15), Immigrant Status and Period of Immigration (9), Age Groups (10) and Sex (3) for the Population of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census - 20% Sample Data (table). Topic-based tabulation. 2006 Census of Population. Statistics Canada catalogue no. 97-562-XCB2006011. Ottawa. Released April 02, 2008. http://www12.statcan.ca/english/census06/data/topics/Print.cfm?PID=92338&GID=837928&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0 (accessed May 22, 2008).

7. Statistics Canada. 2008. Median(1) earnings and employment for full-year, full-time earners, all occupations, both sexes, for Canada, provinces and territories – 20% sample data. Income and Earnings Highlight Tables. 2006 Census. Statistics Canada Catalogue no. 97-563-XWE2006002. Ottawa. Released May 1, 2008. http://www12.statcan.ca/english/census06/data/highlights/Earnings/Table801.cfm?Lang=E&T=801&GH=4&SC=1&S=99&O=A (accessed June 24, 2008).

Appendix 1: Data Tables

Table A.1.1.1

Differences in the status of the apprentice between 2002, 2003, 2004 and 2007, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007[2]													
	Long-term continuers with minimum requirements		Long-term continuers without minimum requirements		Completers with certification		Completers without certification		Discon-tinuers with certification		Discon-tinuers without certification		Total	
Apprentice Status in 2002, 2003 and 2004[1]	%	standard error	%	standard error	%	standard error	%	standard error	%	standard error	%	standard error	number	standard error
Long-term continuers	19.5	(1.3)	12.2	(1.1)	61.9	(1.6)	1.7 [E]	(0.4)	2.6 [E]	(0.5)	2.1 [E]	(0.4)	1,733	(39.7)
Completers	3.9	(0.3)	x	(0.1)	88.3	(0.5)	x	(0.0)	7.5	(0.4)	x	(0.0)	13,154	(114.6)
Discontinuers	11.9	(0.8)	18.2	(0.9)	8.5	(0.7)	14.0	(0.8)	2.7	(0.4)	44.6	(1.2)	9,049	(122.7)

x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
1. Status given by the apprenticeship authority in 2002, 2003 or 2004.
2. Self-identification status by the apprentice in 2007.
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.2
Demographic characteristics by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Demographic characteristics	percent	standard error	percent	standard error	percent	standard error
Gender						
Women	8.5	(0.9)	11.3	(0.4)	10.2	(0.8)
Men	91.5	(0.9)	88.7	(0.4)	89.8	(0.8)
Red Seal Trade						
In a Red Seal trade	96.7	(0.6)	97.0	(0.2)	96.8	(0.5)
Not in a Red Seal trade	2.8 E	(0.6)	2.9	(0.2)	3.2	(0.5)
Could not be determined (uncodeable)	x	(0.2)	x	(0.0)	..	(0.0)
Age by group						
Less than 25	9.8	(1.1)	7.4	(0.4)	15.8	(1.1)
25 to 29	30.4	(1.5)	34.3	(0.7)	30.6	(1.3)
30 to 34	21.9	(1.4)	25.9	(0.6)	19.7	(1.2)
35 to 39	15.3	(1.2)	13.6	(0.5)	13.7	(1.0)
40 to 44	11.1	(1.0)	8.4	(0.4)	8.0	(0.7)
45 to 49	7.4	(0.9)	6.5	(0.4)	7.4	(0.8)
Greater than 50	4.1	(0.5)	4.0	(0.3)	4.9	(0.5)
Citizenship						
Canadian by birth	87.0	(1.1)	90.9	(0.4)	89.7	(0.9)
Landed immigrant	6.9	(0.9)	4.1	(0.3)	4.8	(0.6)
Dual citizenship	4.4	(0.7)	3.7	(0.3)	3.9	(0.6)
Foreign citizen	1.8 E	(0.5)	1.3	(0.2)	1.6 E	(0.4)
Aboriginal peoples status						
Yes	7.0	(0.9)	4.8	(0.3)	7.3	(0.8)
No	93.0	(0.9)	95.2	(0.3)	92.7	(0.8)
Belongs to a visible minority						
Yes	11.5	(1.2)	5.6	(0.4)	5.6	(0.7)
No	88.5	(1.2)	94.4	(0.4)	94.4	(0.7)
Disability						
Had a disability before and still has one	4.1	(0.6)	1.8	(0.2)	3.8	(0.6)
Had a disability before but don't have one now	1.6 E	(0.4)	0.7 E	(0.1)	F	(0.3)
Did not have a disability before but have one now	6.3	(0.8)	4.6	(0.3)	6.2	(0.7)
Did not have a disability before and don't have one now	88.0	(1.1)	92.9	(0.4)	89.2	(1.0)
Total (apprentices) **number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.3

Province and territory of registration in the apprenticeship program (2002 to 2004) and province and territory of residence (2007) by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Province and territory		percent	standard error	percent	standard error	percent	standard error
Province and territory of registration							
Newfoundland and Labrador		..	(0.0)	..	(0.0)	..	(0.0)
Prince Edward Island		..	(0.0)	..	(0.0)	..	(0.0)
Nova Scotia		..	(0.0)	..	(0.0)	..	(0.0)
New Brunswick		..	(0.0)	..	(0.0)	..	(0.0)
Quebec		..	(0.0)	..	(0.0)	..	(0.0)
Ontario		..	(0.0)	..	(0.0)	..	(0.0)
Manitoba		..	(0.0)	..	(0.0)	..	(0.0)
Saskatchewan		..	(0.0)	..	(0.0)	..	(0.0)
Alberta		100.0	(0.0)	100.0	(0.0)	100.0	(0.0)
British Columbia		..	(0.0)	..	(0.0)	..	(0.0)
Yukon		..	(0.0)	..	(0.0)	..	(0.0)
Northwest Territories		..	(0.0)	..	(0.0)	..	(0.0)
Province and territory of residence							
Newfoundland and Labrador		x	(0.1)	0.3 [E]	(0.1)	x	(0.2)
Prince Edward Island		x	(0.1)	..	(0.0)	..	(0.0)
Nova Scotia		x	(0.3)	x	(0.1)	x	(0.1)
New Brunswick		..	(0.0)	x	(0.1)	x	(0.2)
Quebec		..	(0.0)	x	(0.0)	..	(0.0)
Ontario		F	(0.4)	0.4 [E]	(0.1)	F	(0.2)
Manitoba		x	(0.3)	F	(0.1)	x	(0.2)
Saskatchewan		3.0 [E]	(0.6)	1.8	(0.2)	1.9 [E]	(0.4)
Alberta		92.8	(1.0)	95.1	(0.3)	93.9	(0.7)
British Columbia		2.1 [E]	(0.5)	1.8	(0.2)	2.2 [E]	(0.4)
Yukon		..	(0.0)	x	(0.0)	x	(0.1)
Northwest Territories		..	(0.0)	x	(0.0)	..	(0.0)
Nunavut		..	(0.0)	..	(0.0)	x	(0.1)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.4

Marital status of the apprentice before and after the apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Marital status		percent	standard error	percent	standard error	percent	standard error
Marital status at the beginning of program							
Married or common law		38.5	(1.7)	34.6	(0.7)	36.0	(1.4)
Separated or divorced		1.5 E	(0.4)	1.9	(0.2)	2.9 E	(0.5)
Widow or widower		x	(0.2)	x	(0.0)	..	(0.0)
Single and never married		59.6	(1.7)	63.4	(0.7)	61.0	(1.4)
Marital status at the end of program							
Married or common law		63.8	(1.6)	54.5	(0.7)	44.5	(1.4)
Separated or divorced		5.6	(0.7)	4.2	(0.3)	5.0	(0.6)
Widow or widower		x	(0.2)	0.2 E	(0.1)	x	(0.1)
Single and never married		30.2	(1.6)	41.1	(0.7)	50.4	(1.4)
Change in marital status							
No		62.7	(1.7)	73.1	(0.7)	84.3	(1.1)
Yes		37.3	(1.7)	26.9	(0.7)	15.7	(1.1)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.5

Distribution of the highest level of education attained prior to the beginning of the apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Level of education		percent	standard error	percent	standard error	percent	standard error
Less than high school		22.2	(1.4)	12.9	(0.5)	18.7	(1.2)
High school		50.6	(1.7)	56.2	(0.7)	49.0	(1.5)
Some training in other or same trade		3.5 E	(0.6)	3.4	(0.3)	3.7	(0.6)
Trade-vocational diploma or certificate (Diploma of professionnal studies or DEP in Quebec)		6.3	(0.8)	5.5	(0.3)	5.4	(0.6)
Some college, CÉGEP, institute of technology or nursing school		5.9	(0.8)	7.3	(0.4)	8.5	(0.8)
Completed college, CÉGEP, institute of technology or nursing school		7.3	(0.9)	8.0	(0.4)	7.9	(0.8)
Some university or university degree		4.2	(0.7)	6.6	(0.4)	6.7	(0.7)
Other education		..	(0.0)	x	(0.0)	x	(0.1)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.6

Distribution of total employment income of the last twelve months by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Total employment income (dollars)		percent	standard error	percent	standard error	percent	standard error
No income		1.1 [E]	(0.3)	0.5 [E]	(0.1)	1.0 [E]	(0.3)
Less than 20,000		7.2	(0.9)	4.2	(0.3)	9.9	(0.9)
20,000 to less than 40,000		26.1	(1.6)	13.5	(0.5)	24.8	(1.3)
40,000 to less than 60,000		30.7	(1.6)	22.5	(0.6)	21.2	(1.3)
60,000 to less than 80,000		17.6	(1.3)	25.9	(0.7)	16.6	(1.1)
80,000 or more		17.2	(1.3)	33.5	(0.7)	26.4	(1.3)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

[E] use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.7.1

Distribution of union participation by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Union participation		percent	standard error	percent	standard error	percent	standard error
No, not a member at any time		86.2	(1.2)	78.4	(0.6)	76.6	(1.2)
Yes, a member but only before starting the apprenticeship program		13.8	(1.2)	2.5	(0.2)	3.3	(0.5)
Yes, a member but only at the end of the apprenticeship program		..	(0.0)	9.9	(0.4)	6.9	(0.7)
Yes, a member both at the beginning and end of the apprenticeship program		..	(0.0)	9.2	(0.4)	13.2	(1.0)
Total	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.7.2

Distribution of union membership by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Union participation		percent	standard error	percent	standard error	percent	standard error
Construction		47.4	(4.5)	42.8	(1.6)	49.0	(3.0)
Industrial		23.8	(3.8)	35.4	(1.5)	34.2	(2.8)
Public service		F	(1.3)	3.7	(0.5)	2.0 E	(0.7)
Construction and industrial		16.0 E	(3.2)	13.3	(1.1)	10.6 E	(1.8)
Transportation		x	(0.9)	1.7 E	(0.4)	x	(0.4)
Other union		..	(0.0)	1.4 E	(0.3)	F	(0.9)
Total (apprentices)	**number**	**530**	**(47.4)**	**3,216**	**(95.4)**	**1,268**	**(73.2)**

.. not available for a specific reference period
E use with caution
F too unreliable to be published
Note: Since this table gives union membership at any given time, an apprentice can be counted as a member of more than one union.
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.8.1

Distribution of the use of official languages at home and work by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Official Language		percent	standard error	percent	standard error	percent	standard error
One official language spoken at home only		x	(0.2)	x	(0.0)	x	(0.1)
One official language spoken at work only		5.0	(0.8)	3.2	(0.3)	3.0 E	(0.5)
One official language spoken at home and at work		93.6	(0.8)	95.9	(0.3)	96.1	(0.6)
No official language spoken at home and at work		x	(0.1)	x	(0.1)	..	(0.0)
Both official languages spoken at home only		..	(0.0)	..	(0.0)	..	(0.0)
Both official languages spoken at work only		..	(0.0)	..	(0.0)	..	(0.0)
Both official languages spoken at home or at work		1.0 E	(0.3)	0.7 E	(0.1)	0.7 E	(0.2)
Both official languages spoken at home and at work		x	(0.1)	..	(0.0)	x	(0.0)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.1.8.2

Distribution of the use of English or French at home or a work by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Official language spoken		percent	standard error	percent	standard error	percent	standard error
English only		92.3	(0.9)	95.6	(0.3)	95.7	(0.6)
French only		..	(0.0)	x	(0.0)	..	(0.0)
Other language		7.7	(0.9)	4.4	(0.3)	4.3	(0.6)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.2.1

Main factors that influenced the interest of the apprentice in their trade by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Main factor	percent	standard error	percent	standard error	percent	standard error
High school, vocational, college or university course or program	11.7	(1.1)	16.4	(0.6)	13.6	(1.0)
Knowledge of the trade from prior job or experience	31.3	(1.6)	30.5	(0.7)	30.0	(1.4)
High school work experience or co-op program	9.7	(1.0)	8.7	(0.4)	7.6	(0.8)
Other tradespeople (friends, relatives, co-workers, employers, union representatives), counselors, teacher	55.4	(1.7)	54.0	(0.7)	53.7	(1.5)
A hobby	23.6	(1.4)	26.2	(0.6)	23.7	(1.3)
Advertising or the media, personal research (internet, books, magazines, catalogues), job fair and postings, school visits	5.1	(0.7)	4.6	(0.3)	5.1	(0.7)
Always interested in working in the trade, working currently in the trade	2.6 [E]	(0.5)	2.2	(0.2)	2.3 [E]	(0.4)
Other factors	16.4	(1.2)	16.9	(0.6)	16.6	(1.1)
Total (apprentices) number	**3,808**	**(117.8)**	**14,769**	**(156.6)**	**5,359**	**(133.6)**

[E] use with caution

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.2.2

Reasons influencing apprentice registration in their trade by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Reasons	percent	standard error	percent	standard error	percent	standard error
Interested in the trade or that line of work, like the work conditions	47.9	(1.7)	49.9	(0.7)	47.7	(1.5)
Expected good pay, better wages or a pay increase	29.5	(1.6)	27.4	(0.7)	25.9	(1.3)
Expected a steady job, more job availability and opportunities, high demand for the trade	15.0	(1.2)	17.0	(0.6)	15.4	(1.0)
Already had job, knowledge, experience or qualification in the trade	14.3	(1.2)	13.3	(0.5)	13.8	(1.0)
Suggestion from employer, co-worker, union, teacher or career counsellor	10.2	(1.0)	10.5	(0.5)	11.7	(0.9)
Needed a job or a trade, received a job offer	7.5	(0.9)	7.8	(0.4)	7.9	(0.8)
Required by the law, the employer, the union or the apprenticeship office	2.4 [E]	(0.5)	3.0	(0.3)	2.8 [E]	(0.5)
Union benefits	F	(0.3)	0.5 [E]	(0.1)	F	(0.3)
Hoped to own a business	3.1 [E]	(0.6)	2.0	(0.2)	2.5 [E]	(0.5)
Suggestion from family, relatives or friends in the trade or not, family business	4.8	(0.8)	4.4	(0.3)	2.7 [E]	(0.5)
Possibility of better job or career (advancement, challenge), gain greater knowledge, experience and certification (licence, ticket, Red Seal), work diversity	9.4	(1.0)	7.5	(0.4)	8.0	(0.8)
Other reasons	6.2	(0.8)	6.7	(0.4)	6.4	(0.7)
Total (apprentices) number	**3,808**	**(117.8)**	**14,769**	**(156.6)**	**5,359**	**(133.6)**

[E] use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.2.3

Experiences in the trade prior to registration by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
	percent	standard error	percent	standard error	percent	standard error
Prior work related to trade						
Yes	71.2	(1.5)	66.1	(0.7)	64.4	(1.4)
No	28.8	(1.5)	33.9	(0.7)	35.6	(1.4)
Prior technical training						
Yes	41.2	(1.7)	39.2	(0.7)	35.2	(1.4)
No	58.8	(1.7)	60.8	(0.7)	64.8	(1.4)
Total (apprentices) number	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.1.1

Percentages of apprentices who had difficulty finding an employer for the first apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Had problem in finding employer		percent	standard error	percent	standard error	percent	standard error
Yes, had difficulty in finding an employer		18.3	(1.3)	17.0	(0.6)	16.9	(1.1)
No, did not have difficulty in finding an employer		81.7	(1.3)	83.0	(0.6)	83.1	(1.1)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.1.2

Reasons for difficulty in finding an employer for the first apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Reasons for having difficulty		percent	standard error	percent	standard error	percent	standard error
No employer hiring apprentices		35.7	(3.9)	39.5	(1.8)	37.2	(3.5)
No work in the trade at the time		15.4 E	(2.8)	21.9	(1.5)	28.6	(3.3)
Distance to employer too great		x	(0.8)	F	(0.3)	x	(0.8)
Too many apprentices for the number of available employers (jobs) , journeyperson-to-apprentice ratio too high		F	(2.0)	2.6 E	(0.6)	F	(1.2)
Lack of work experience or knowledge (employer wanted licenced/qualified apprentice/journeyperson), employer unwilling to train or pay apprentice		13.0 E	(2.7)	20.6	(1.5)	14.6 E	(2.6)
Discrimination (age, gender, ethnic origin, language, education, foreign credentials, favouritism)		8.1 E	(2.3)	2.6 E	(0.6)	F	(1.4)
Union issues / union requirements		x	(1.1)	F	(0.3)	x	(0.6)
Other reasons		19.7 E	(3.3)	11.0	(1.1)	10.3 E	(2.3)
Total (apprentices)	**number**	**696**	**(55.5)**	**2,502**	**(87.2)**	**902**	**(64.1)**

x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.2

Obstacles encountered during the apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Obstacles encountered	percent	standard error	percent	standard error	percent	standard error
Insufficient income, delays in funding including Employment Insurance (EI) payments and training allowances	52.9	(1.7)	55.0	(0.7)	36.8	(1.4)
Problems with co-workers, employers or union, sexual harassment and discrimination	14.3	(1.2)	9.1	(0.4)	12.7	(1.0)
Working conditions too physically demanding (cold, heights, claustrophobia, allergies, product sensitivity, hazardous goods) language barrier, schedule	18.5	(1.3)	15.1	(0.5)	14.8	(1.1)
Technical training and/or on-the-job training, exam too difficult or not reflecting course material or reality, inappropriate training	19.3	(1.3)	9.6	(0.4)	12.6	(1.0)
Inconsistent work or lack of work	26.5	(1.5)	18.2	(0.6)	24.9	(1.3)
Lack of awareness of how apprenticeship system works, no credits given for prior work or technical training, problems with apprenticeship board and programs (paperwork, administration, communication, lack of information, cancellation or lack of classes)	24.9	(1.5)	16.8	(0.6)	21.8	(1.2)
Employers not following the rules, cancelling apprenticeship or not giving time for technical training	24.6	(1.5)	19.5	(0.6)	18.7	(1.2)
Transportation, distance too great	11.9	(1.1)	5.9	(0.3)	5.7	(0.7)
Cost of tools, tuition and/or books, no tool allowances, costs not tax deductible	21.9	(1.4)	26.0	(0.6)	20.1	(1.2)
Family or personal problems	1.5 [E]	(0.4)	0.3 [E]	(0.1)	1.0 [E]	(0.3)
Injury, health or medical reasons (illness, disability, accident)	1.9 [E]	(0.5)	0.8	(0.1)	2.6 [E]	(0.5)
Lack of journeyperson (supervision), journeyperson not qualified	9.8	(1.0)	6.8	(0.4)	11.3	(1.0)
Other obstacles	22.2	(1.4)	26.6	(0.7)	29.1	(1.4)
Total (apprentices) number	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

[E] use with caution

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.3

Help received other than training allowances and employment insurance by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Help received	percent	standard error	percent	standard error	percent	standard error
Wages or other financial aid during technical training, employer/union paid wages, tution, exam fees, books and tools, received grants, loans and scholarships from government, apprenticeship board or Aboriginal band	21.7	(1.4)	27.8	(0.7)	14.8	(1.0)
Wages above legally stipulated minimum for apprentices	21.2	(1.4)	19.4	(0.6)	19.8	(1.2)
Housing, accommodation, meal or living allowance	8.9	(1.0)	6.9	(0.4)	8.1	(0.8)
Daycare	x	(0.2)	0.5 [E]	(0.1)	1.2 [E]	(0.3)
Transportation, parking, travel expenses	10.1	(1.0)	7.4	(0.4)	8.7	(0.8)
Employer, union or apprenticeship board provided anti-harassment or workplace orientation programs	x	(0.1)	x	(0.0)	..	(0.0)
Programs offered by community organizations, Aboriginal Human Resource Development Agreement, band councils or other support groups	x	(0.2)	..	(0.0)	x	(0.2)
Employee assistance to deal with harassment	..	(0.0)	..	(0.0)	..	(0.0)
Employment assistance to upgrade math and reading	..	(0.0)	x	(0.0)	..	(0.0)
Construction industry training fund	x	(0.2)	x	(0.0)	x	(0.1)
Financial support from family and friends, living with parents	3.3 [E]	(0.6)	6.7	(0.4)	2.6 [E]	(0.5)
Other help	56.5	(1.7)	57.1	(0.7)	63.6	(1.4)
Total (apprentices) number	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.4.1

Change of employer during apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Changed employer during apprenticeship	percent	standard error	percent	standard error	percent	standard error
Yes, changed employer	59.6	(1.7)	53.0	(0.7)	36.1	(1.4)
No, did not change employer	40.4	(1.7)	47.0	(0.7)	63.9	(1.4)
Total (apprentices) number	**3,758**	**(117.1)**	**14,769**	**(156.4)**	**5,257**	**(132.9)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.4.2

Reasons for changing employer by apprentice status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007					
	Long-term continuers		Completers		Discontinuers	
Reason for changing employer	percent	standard error	percent	standard error	percent	standard error
End of work on the project, new contracts	9.6	(1.3)	8.8	(0.6)	13.9	(1.7)
Work no longer available with that employer (business sold, company closed, bankrupcy, change of ownership, employer retired, died or moved)	23.1	(1.9)	25.9	(0.9)	27.7	(2.2)
Sought employer with more diverse training or advancement opportunities, wanted greater experience, a specialization or new challenges	7.1	(1.1)	13.6	(0.7)	6.9 [E]	(1.2)
Sought better trainer	F	(0.5)	1.3 [E]	(0.2)	F	(0.6)
Sought better employer, started own business	14.0	(1.5)	11.8	(0.7)	12.0	(1.6)
Sought better working conditions (better income, benefits, full-time job, more hours)	22.5	(1.9)	18.2	(0.8)	17.1	(1.9)
Family obligations, could not move, personal reasons (marriage, divorce, separation, death in family, pregnancy, maternity leave)	F	(0.5)	1.5 [E]	(0.3)	F	(0.4)
Too far to travel	2.5 [E]	(0.7)	3.2	(0.4)	2.8 [E]	(0.8)
Employer could not keep as many apprentices	x	(0.2)	0.6 [E]	(0.2)	x	(0.5)
Moved or wanted to move	4.7 [E]	(1.0)	4.9	(0.4)	5.2 [E]	(1.1)
Harassment or discrimination, disagreement or conflict of interest with employer, supervisor, union or co-worker, dislike of employer or co-worker	3.0 [E]	(0.8)	1.8	(0.3)	x	(0.3)
Other reason	10.5	(1.4)	8.4	(0.6)	10.7	(1.5)
Total (apprentices) number	**2,252**	**(94.2)**	**7,861**	**(139.0)**	**1,911**	**(90.0)**

x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.3.5

Main reason discontinuers did not complete apprenticeship program, Alberta, National Apprenticeship Survey, 2007

		Discontinuers	
Main reason		percent	standard error
Not enough work or income		13.6	(1.1)
Received better job offer		10.7	(1.0)
Disliked the work or working conditions		8.6	(0.9)
Disliked or had difficulty with the technical training		2.4 E	(0.5)
No certification required to work in the trade		1.0 E	(0.3)
Temporary job, had no intention to certify, hobby		1.4 E	(0.4)
Moved for unrelated reason		1.9 E	(0.4)
Illness, disability or medical reasons		5.3	(0.7)
Returned to school, unrelated to trade		2.8 E	(0.5)
Harassment or discrimination, disagreement or conflict of interest with employer or union		2.4 E	(0.5)
Family issues (e.g. caring for family, divorce, separation, death in family), personal reasons		3.3 E	(0.6)
Insufficient government financial assistance		1.8 E	(0.4)
Cost of tools		x	(0.1)
Wanted to or changed job/career, became self-employed, lost interest in the trade		7.1	(0.8)
Company, employer or union went bankrupt, closed or moved; employer/union discontinued apprenticeship program, employer did not follow rules, was laid-off		4.9	(0.7)
Other reason		32.6	(1.3)
Total (apprentices)	**number**	**5,359**	**(133.5)**

x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.4.1

Distribution of certification status for completers and discontinuers, Alberta, National Apprenticeship Survey, 2007

		Completers		Discontinuers	
Certification status		percent	standard error	percent	standard error
Without certification, in a Red Seal trade		8.5	(0.5)	74.0	(1.1)
Without certification, not in a Red Seal trade		0.3 [E]	(0.1)	2.2 [E]	(0.4)
With certification of qualification only, in a Red Seal trade		17.3	(0.5)	4.7	(0.5)
With certification of qualification only, not in a Red Seal trade		1.8	(0.2)	0.9 [E]	(0.2)
With certification of qualification and interprovincial certification, in a Red Seal trade		71.2	(0.7)	18.1	(1.0)
With certification of qualification and interprovincial certification, not in a Red Seal trade		0.8 [E]	(0.1)	x	(0.1)
Total (apprentices)	**number**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.5.1.1

Distribution of labour force characteristics by apprentice status, Alberta, National Apprenticeship Survey, 2007

Labour force characteristics		Completers		Discontinuers	
		percent	standard error	percent	standard error
Employed		93.3	(0.4)	89.2	(0.9)
Unemployed		3.7	(0.3)	4.6	(0.6)
Not in Labour Force		2.9	(0.3)	6.2	(0.7)
Total (apprentices)	**number**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.5.1.2

Employed status by apprentice status, Alberta, National Apprenticeship Survey, 2007

Employed status		Completers		Discontinuers	
		percent	standard error	percent	standard error
Paid employee with permanent job		77.3	(0.6)	76.6	(1.3)
Paid employee with temporary job		3.5	(0.3)	4.0	(0.6)
Paid employee with seasonal job		1.2	(0.2)	2.2[E]	(0.5)
Self-employed		18.0	(0.6)	17.3	(1.2)
Unpaid family worker		x	(0.0)	..	(0.0)
Total (apprentices)	**number**	**13,763**	**(155.7)**	**4,775**	**(129.1)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.5.2

Hourly wages for most recent job held by apprentice status, Alberta, National Apprenticeship Survey, 2007

Hourly wages (dollars)		Completers		Discontinuers	
		percent	standard error	percent	standard error
Less than 10		2.2	(0.2)	3.1[E]	(0.5)
10 to less than 15		6.0	(0.4)	10.7	(1.0)
15 to less than 20		9.0	(0.4)	18.5	(1.2)
20 to less than 25		11.2	(0.5)	17.1	(1.2)
25 to less than 30		18.3	(0.6)	14.0	(1.0)
30 to less than 35		23.9	(0.6)	12.4	(1.0)
35 to less than 40		11.5	(0.5)	6.7	(0.7)
40 to less than 45		5.2	(0.3)	4.9	(0.6)
45 to less than 50		2.6	(0.2)	3.2	(0.5)
Greater or equal to 50		8.5	(0.4)	8.3	(0.9)
Total (apprentices)	**number**	**14,663**	**(156.0)**	**5,210**	**(132.6)**

E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.6.1.1

Move between province of residence 12 months before registration in the apprenticeship program and the province of registration by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Movement		percent	standard error	percent	standard error	percent	standard error
Yes, moved between province and territory		12.7	(1.2)	11.1	(0.5)	8.8	(0.8)
No, stayed in same province and territory		87.3	(1.2)	88.9	(0.5)	91.2	(0.8)
Total (apprentices)	**number**	**3,808**	**(117.7)**	**14,769**	**(156.4)**	**5,359**	**(133.5)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.6.1.2

Destination of the move between province of residence 12 months before registration in the apprenticeship program and the province of registration by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Destination		percent	standard error	percent	standard error	percent	standard error
To or within the Atlantic region		..	(0.0)	..	(0.0)	..	(0.0)
To Quebec region		..	(0.0)	..	(0.0)	..	(0.0)
To Ontario region		..	(0.0)	..	(0.0)	..	(0.0)
To or within the Prairies region		87.3	(3.4)	94.7	(1.0)	92.5	(2.8)
To British Colombia region		..	(0.0)	..	(0.0)	..	(0.0)
To or within the Territories region		..	(0.0)	..	(0.0)	..	(0.0)
Entered Canada		12.7 E	(3.4)	5.3 E	(1.0)	F	(2.8)
Left Canada		..	(0.0)	..	(0.0)	..	(0.0)
Total (apprentices)	**number**	**482**	**(47.2)**	**1,632**	**(72.2)**	**470**	**(46.0)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.6.2.1

Move between province of registration and the province of apprenticeship training by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007					
		Long-term continuers		Completers		Discontinuers	
Movement		percent	standard error	percent	standard error	percent	standard error
Yes, moved between province and territory		6.5	(0.9)	2.0	(0.2)	2.0 E	(0.4)
No, stayed in same province and territory		93.5	(0.9)	98.0	(0.2)	98.0	(0.4)
Total (apprentices)	**number**	**3,733**	**(116.7)**	**14,769**	**(156.4)**	**5,257**	**(132.9)**

E use with caution
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.6.2.2

Destination of the move between province of registration and the province of apprenticeship training by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Long-term continuers		Completers		Discontinuers	
Destination		percent	standard error	percent	standard error	percent	standard error
To or within the Atlantic region		x	(3.9)	x	(3.5)	..	(0.0)
To Quebec region		..	(0.0)	..	(0.0)	..	(0.0)
To Ontario region		F	(4.9)	..	(0.0)	x	(6.1)
To or within the Prairies region		36.8 E	(7.2)	47.8	(6.1)	59.2 E	(10.6)
To British Colombia region		40.7 E	(7.3)	36.4	(5.8)	30.3 E	(9.8)
To or within the Territories region		..	(0.0)	F	(2.8)	..	(0.0)
Entered Canada		..	(0.0)	..	(0.0)	..	(0.0)
Left Canada		x	(2.3)	x	(0.5)	x	(3.2)
Total (apprentices)	**number**	**241**	**(35.6)**	**299**	**(36.0)**	**107 E**	**(23.0)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.6.3.1

Move between province of registration and current province of work by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007			
		Completers		Discontinuers	
Movement		percent	standard error	percent	standard error
Yes, moved between province and territory		5.0	(0.3)	7.5	(0.9)
No, stayed in same province and territory		95.0	(0.3)	92.5	(0.9)
Total (apprentices)	**number**	**13,905**	**(155.6)**	**4,845**	**(129.7)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.6.3.2

Destination of the move between province of registration and current province of work by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Apprentice status in 2007			
		Completers		Discontinuers	
Destination		percent	standard error	percent	standard error
To or within the Atlantic region		6.3 [E]	(1.9)	F	(3.6)
To Quebec region		..	(0.0)	..	(0.0)
To Ontario region		8.0 [E]	(2.0)	F	(2.8)
To or within the Prairies region		24.9	(3.2)	26.3 [E]	(5.2)
To British Colombia region		48.1	(3.6)	44.1	(5.9)
To or within the Territories region		7.3 [E]	(1.8)	x	(3.1)
Entered Canada		..	(0.0)	..	(0.0)
Left Canada		5.4 [E]	(1.6)	x	(2.6)
Total (apprentices)	**number**	**690**	**(49.3)**	**363**	**(42.4)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.7.1.1

Differences in the status of the apprentice between 2002, 2003, 2004 and 2007 by gender, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007[2]							
	Long-term continuers		Completers		Discontinuers		Total	
Apprentice status in 2002, 2003 and 2004[1]	percent	standard error	percent	standard error	percent	standard error	number	standard error
Women								
Long-term continuers	16.0 E	(4.4)	80.6	(4.9)	x	(2.0)	43 E	(7.6)
Completers	4.6 E	(0.9)	87.2	(1.5)	8.2	(1.2)	1,622	(49.3)
Discontinuers	27.5	(3.3)	25.7	(3.2)	46.7	(3.7)	877	(57.4)
Men								
Long-term continuers	32.2	(1.5)	63.1	(1.6)	4.7	(0.7)	1,690	(39.6)
Completers	4.0	(0.3)	88.6	(0.5)	7.4	(0.4)	11,532	(114.6)
Discontinuers	30.4	(1.2)	22.2	(1.1)	47.5	(1.3)	8,172	(125.6)

x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
1. Status given by the apprenticeship authority in 2002, 2003 or 2004.
2. Self-identification status by the apprentice in 2007.
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.7.1.2

Differences in the status of the apprentice between 2002, 2003, 2004 and 2007 by Aboriginal status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007[2]							
	Long-term continuers		Completers		Discontinuers		Total	
Apprentice status in 2002, 2003 and 2004[1]	percent	standard error	percent	standard error	percent	standard error	number	standard error
Aboriginal peoples								
Long-term continuers	38.6 E	(6.9)	58.0	(7.0)	x	(2.7)	86	(11.8)
Completers	4.6 E	(1.5)	89.7	(2.2)	5.6 E	(1.6)	606	(42.6)
Discontinuers	30.8	(4.1)	16.0 E	(3.3)	53.2	(4.5)	669	(58.0)
All others								
Long-term continuers	31.3	(1.5)	63.9	(1.6)	4.8	(0.7)	1,647	(39.7)
Completers	3.9	(0.3)	88.4	(0.5)	7.7	(0.4)	12,499	(117.5)
Discontinuers	30.2	(1.2)	21.9	(1.0)	47.9	(1.3)	8,309	(128.1)

x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
1. Status given by the apprenticeship authority in 2002, 2003 or 2004.
2. Self-identification status by the apprentice in 2007.
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.7.1.3

Differences between apprentice status in 2002, 2003, 2004 and 2007 by immigrant status, Alberta, National Apprenticeship Survey, 2007

	Apprentice status in 2007[2]							
	Long-term continuers		Completers		Discontinuers		Total	
Apprentice status in 2002, 2003 and 2004[1]	percent	standard error	percent	standard error	percent	standard error	number	standard error
Landed immigrants								
Long-term continuers	54.8	(8.6)	45.2 E	(8.6)	..	(0.0)	60 E	(10.3)
Completers	6.0 E	(1.8)	85.2	(2.7)	8.8 E	(2.1)	526	(38.6)
Discontinuers	38.0	(4.8)	23.5 E	(4.2)	38.5	(4.8)	536	(50.9)
All others								
Long-term continuers	30.8	(1.5)	64.3	(1.6)	4.9	(0.7)	1,673	(39.8)
Completers	3.8	(0.3)	88.6	(0.5)	7.5	(0.4)	12,586	(116.8)
Discontinuers	29.8	(1.2)	21.4	(1.0)	48.8	(1.3)	8,453	(125.4)

E use with caution
1. Status given by the apprenticeship authority in 2002, 2003 or 2004.
2. Self-identification status by the apprentice in 2007.
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.7.2.1

Main reason why women and men discontinuers did not complete their apprenticeship program, Alberta, National Apprenticeship Survey, 2007

	Discontinuers			
	Women		Men	
Main reason	percent	standard error	percent	standard error
Not enough work or income	7.9 E	(2.5)	14.3	(1.2)
Received better job offer	F	(2.1)	11.2	(1.1)
Disliked the work or working conditions	F	(2.3)	8.9	(0.9)
Disliked or had difficulty with the technical training	x	(1.6)	2.4 E	(0.5)
No certification required to work in the trade	x	(0.4)	1.0 E	(0.3)
Temporary job, had no intention to certify, hobby	x	(0.9)	1.5 E	(0.4)
Moved for unrelated reason	x	(1.2)	1.9 E	(0.5)
Illness, disability or medical reasons	F	(2.4)	5.0	(0.7)
Returned to school, unrelated to trade	x	(1.6)	2.8 E	(0.6)
Harassment or discrimination, disagreement or conflict of interest with employer or union	8.1 E	(2.6)	1.7 E	(0.5)
Family issues (e.g. caring for family, divorce, separation, death in family), personal reasons	14.4 E	(3.5)	2.1 E	(0.5)
Insufficient government financial assistance	x	(1.3)	1.8 E	(0.5)
Cost of tools	..	(0.0)	x	(0.1)
Wanted to or changed job/career, became self-employed, lost interest in the trade	F	(1.8)	7.4	(0.9)
Company, employer or union went bankrupt, closed or moved; employer / union discontinued apprenticeship program, employer did not follow rules, was laid-off	x	(1.3)	5.3	(0.7)
Other reason	31.7	(3.9)	32.7	(1.4)
Total (apprentices) number	**545**	**(47.0)**	**4,815**	**(128.7)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.7.2.2

Main reason why Aboriginal people discontinuers and all other discontinuers did not complete their apprenticeship program, Alberta, National Apprenticeship Survey, 2007

	Discontinuers			
	Aboriginal peoples		All others	
Main reason	percent	standard error	percent	standard error
Not enough work or income	18.9 [E]	(4.6)	13.3	(1.1)
Received better job offer	16.3 [E]	(4.4)	10.2	(1.0)
Disliked the work or working conditions	F	(3.5)	8.5	(0.9)
Disliked or had difficulty with the technical training	x	(2.1)	2.4 [E]	(0.5)
No certification required to work in the trade	x	(1.5)	1.0 [E]	(0.3)
Temporary job, had no intention to certify, hobby	..	(0.0)	1.5 [E]	(0.4)
Moved for unrelated reason	x	(2.1)	1.8 [E]	(0.4)
Illness, disability or medical reasons	x	(2.9)	5.0	(0.7)
Returned to school, unrelated to trade	x	(1.8)	2.9 [E]	(0.6)
Harassment or discrimination, disagreement or conflict of interest with employer or union	x	(2.2)	2.2 [E]	(0.5)
Family issues (e.g. caring for family, divorce, separation, death in family), personal reasons	x	(2.0)	3.3 [E]	(0.6)
Insufficient government financial assistance	x	(1.4)	1.8 [E]	(0.4)
Cost of tools	..	(0.0)	x	(0.1)
Wanted to or changed job/career, became self-employed, lost interest in the trade	F	(3.4)	7.0	(0.8)
Company, employer or union went bankrupt, closed or moved; employer / union discontinued apprenticeship program, employer did not follow rules, was laid-off	x	(2.1)	5.1	(0.7)
Other reason	17.7 [E]	(4.0)	33.7	(1.4)
Total (apprentices) number	**387**	**(44.0)**	**4,933**	**(130.5)**

.. not available for a specific reference period
x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
F too unreliable to be published
Source Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.7.2.3

Main reason why landed immigrant discontinuers and all other discontinuers did not complete their apprenticeship program, Alberta, National Apprenticeship Survey, 2007

	Discontinuers			
	Landed immigrants		All others	
Main reason	percent	standard error	percent	standard error
Not enough work or income	F	(4.4)	13.8	(1.1)
Received better job offer	x	(2.7)	11.1	(1.0)
Disliked the work or working conditions	x	(4.2)	8.5	(0.9)
Disliked or had difficulty with the technical training	..	(0.0)	2.6 E	(0.5)
No certification required to work in the trade	x	(1.6)	0.9 E	(0.3)
Temporary job, had no intention to certify, hobby	..	(0.0)	1.5 E	(0.4)
Moved for unrelated reason	..	(0.0)	2.0 E	(0.5)
Illness, disability or medical reasons	x	(2.6)	5.2	(0.7)
Returned to school, unrelated to trade	x	(2.7)	2.9 E	(0.5)
Harassment or discrimination, disagreement or conflict of interest with employer or union	x	(2.3)	2.4 E	(0.5)
Family issues (e.g. caring for family, divorce, separation, death in family), personal reasons	..	(0.0)	3.5 E	(0.6)
Insufficient government financial assistance	..	(0.0)	1.9 E	(0.4)
Cost of tools	..	(0.0)	x	(0.1)
Wanted to or changed job/career, became self-employed, lost interest in the trade	16.1 E	(4.9)	6.7	(0.8)
Company, employer or union went bankrupt, closed or moved, employer/union discontinued apprenticeship program, employer did not follow rules, was laid-off	x	(2.5)	5.1	(0.7)
Other reason	45.4	(6.7)	31.9	(1.3)
Total (apprentices) number	**258**	**(34.4)**	**5,062**	**(131.0)**

.. not available for a specific reference period
... not applicable
x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.8.1.1

Supervision of apprentices during apprenticeship program by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Long-term continuers		Completers		Discontinuers	
		percent	standard error	percent	standard error	percent	standard error
Yes, had supervision at all times during program		79.6	(1.4)	80.6	(0.6)	81.7	(1.1)
No, did not have supervision at all times during program		20.4	(1.4)	19.4	(0.6)	18.3	(1.1)
Total (apprentices)	**number**	**3,733**	**(116.7)**	**14,769**	**(156.4)**	**5,257**	**(132.9)**

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.8.1.2

Longest duration without supervision by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Long-term continuers		Completers		Discontinuers	
Duration		percent	standard error	percent	standard error	percent	standard error
Less than 1 week		23.3	(3.6)	19.7	(1.4)	27.0	(3.4)
1 week		7.8 E	(2.1)	15.2	(1.3)	15.3 E	(2.9)
2 weeks		10.0 E	(2.6)	10.2	(1.0)	9.1 E	(2.2)
3 weeks		F	(1.6)	4.6	(0.7)	F	(1.3)
4 weeks		6.5 E	(2.1)	6.4	(0.9)	4.5 E	(1.5)
5 to 9 weeks		6.0 E	(1.9)	6.3	(0.9)	9.4 E	(2.2)
10 to 14 weeks		8.5 E	(2.4)	4.3 E	(0.7)	x	(0.6)
15 weeks or more		33.5	(3.9)	33.4	(1.7)	30.6	(3.5)
Total (apprentices)	**number**	**758**	**(56.9)**	**2,858**	**(91.4)**	**954**	**(64.0)**

x suppressed to meet the confidentiality requirements of the *Statistics Act*
E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.8.1.3

Quality of on the job training received by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Long-term continuers		Completers		Discontinuers	
		percent	standard error	percent	standard error	percent	standard error
Journeyperson went too fast when explaining duties							
Strongly agree		3.1 E	(0.6)	1.7	(0.2)	1.7 E	(0.4)
Agree		11.0	(1.1)	10.0	(0.5)	10.6	(1.0)
Disagree		69.5	(1.6)	70.3	(0.7)	66.6	(1.4)
Strongly disagree		16.4	(1.3)	17.9	(0.6)	21.2	(1.2)
Found work as an apprentice difficult							
Strongly agree		F	(0.3)	0.6 E	(0.1)	F	(0.2)
Agree		12.9	(1.2)	11.4	(0.5)	11.1	(1.0)
Disagree		69.9	(1.6)	72.7	(0.7)	71.0	(1.4)
Strongly disagree		16.4	(1.3)	15.2	(0.5)	17.1	(1.1)
Total (apprentices)	**number**	**3,733**	**(116.7)**	**14,769**	**(156.4)**	**5,257**	**(132.9)**

E use with caution
F too unreliable to be published
Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Table A.1.8.2

Quality of technical training received by apprentice status, Alberta, National Apprenticeship Survey, 2007

		Long-term continuers		Completers		Discontinuers	
		percent	standard error	percent	standard error	percent	standard error
Rating in terms of providing up-to-date equipment or technology							
Excellent		36.0	(2.3)	36.7	(1.0)	41.7	(2.6)
Good		43.3	(2.4)	46.8	(1.0)	43.5	(2.6)
Fair		15.9	(1.7)	13.1	(0.7)	11.1	(1.7)
Poor		4.8 [E]	(0.9)	3.5	(0.3)	3.7 [E]	(0.9)
Had difficulty understanding written material given in class or online							
Strongly agree		10.9	(1.4)	3.5	(0.4)	5.2 [E]	(1.2)
Agree		37.1	(2.3)	24.0	(0.8)	26.7	(2.4)
Disagree		40.5	(2.3)	54.4	(1.0)	48.2	(2.6)
Strongly disagree		11.5	(1.5)	18.1	(0.8)	19.8	(2.0)
Instructor often went too fast and apprentice often got lost							
Strongly agree		6.5 [E]	(1.1)	1.6	(0.2)	3.3 [E]	(0.9)
Agree		19.5	(1.9)	9.0	(0.6)	17.5	(2.1)
Disagree		62.5	(2.3)	70.0	(0.9)	59.7	(2.6)
Strongly disagree		11.5	(1.5)	19.4	(0.8)	19.6	(2.0)
Found the technical training too difficult							
Strongly agree		4.7 [E]	(0.9)	1.2 [E]	(0.2)	3.0 [E]	(0.9)
Agree		20.6	(1.9)	10.4	(0.6)	16.6	(2.0)
Disagree		62.3	(2.3)	71.4	(0.9)	61.8	(2.5)
Strongly disagree		12.4	(1.6)	17.1	(0.7)	18.6	(2.0)
Total (apprentices)	**number**	**1,865**	**(85.0)**	**8,328**	**(136.8)**	**1,630**	**(82.6)**

[E] use with caution

Source: Statistics Canada, National Apprenticeship Survey (NAS), 2007.

Appendix 2: Glossary of terms for Apprenticeship Training and Certification

List of terms

A

Ability
Academic Qualifications
Accreditation
Apprentice
Apprentice On-the-Job Training Standards/ Record Book (Logbook)
Apprenticeship
Apprenticeship Accreditation
Apprenticeship Advisory Board Provincial/ Territorial
Apprenticeship Contract/Agreement
Apprenticeship Program Outline
Apprenticeship Registration
Apprenticeship Technical Training
Apprenticeship Term
Apprenticeship Training
Assessment
Assessment criteria

B

Basic Skills
Block Release Training
Bridging Program

C

Calendar
Canadian Apprenticeship Forum (CAF)
Canadian Council of Directors of Apprenticeship (CCDA)
Canadian Labour Force Development Board (CLFDB) - National Apprenticeship Committee
Certificate of Apprenticeship
Certificate of Qualification
Certificate of Qualification Examination
Certification
Challenge Exam
Challenge/Exemption
Common Core
Community College
Competency
Competency Assessment
Competency-Based Learning
Competency Profile
Completion of Apprenticeship
Compulsory Apprenticeship
Compulsory Certification
Continuing Competence
Cooperative Education
Core Curriculum
Correspondence Study
Course
Course Outline
Credentialing
Criterion
Curriculum
Curriculum Resources

D

DACUM
DACUM Chart
Day Release Training
Designated Apprenticeable Trade
Designated Red Seal Trade
Discontinuer

E

Education Level - Trade/Vocational
Education/Entrance Requirements
Employer
Entrance Requirements
Equivalency
Essential Skills
Examination - Interprovincial
Examination Item Bank
Examination Plan
Examination standards
Executive Director

F

Fixed Entry/Open Exit Training
Flexible/Distance Education
Forum of Labour Market Ministers (FLMM)
Funding for Apprenticeship Training

G

Grandparenting (Acquired Rights)

H

Hour Release Training
Human Resources and Social Development (HRSD)

I

Individualized Instruction
Industry Trade Advisory Committee
Industry Training
In-School Training
Internship
Interprovincial Computerized Examination Management System (ICEMS)
Interprovincial Common Core Curriculum Standard (ICCCS)
Interprovincial Red Seal Examination
ICEMS Steering Committee
Interprovincial Standards Examination Committee (ISEC)
Interprovincial Standards (Red Seal) Program

J

Journeyperson
Journeyperson Certification Only
Journeyperson Certification - Compulsory
Journeyperson Certification - Voluntary

L

Labour Market
Legislation - Apprenticeship
Licence
Licensing
Licensing, Certification or Registration
Licensure
Linkages/Credit
Logbook

M

Maintenance
Mentorship
Modular Training
Modularized Learning Resource Materials
Module
Mutual Recognition

N

National Occupational Analysis (NOA)
National Occupational Classification (NOC)
National standards

O

Occupation
Occupational Mobility
Occupational Qualifications
Occupational Requirement
Occupational Standard
On-the-Job Training

P

Performance-Based Training
Performance criterion
Period of Articling/Internship
Portfolio
Practical Training
Practical Training Record Book
Pre-Apprenticeship Training
Pre-Employment Training
Pre-Employment Training - Compulsory
Pre-Employment Training - Voluntary
Prerequisite
Prior Learning Assessment and Recognition (PLAR)
Professional Development
Program Development Officers
Program Standards
Provincial Trade Advisory Committee (PTAC)

Q

Qualification

R

Ratio
Ratio - Journeyperson/Apprentice
Recognized Training Programs
Red Seal
Red Seal Designated Trade
Registered Apprentice
Regulations
Retraining

S

Scope of a Trade
Sector Council
Self-Paced Learning
Sequencing of Curriculum
Skills
Skill level
Skill Type
Skill updating
Specialization
Sponsor
Standard
Standards - Examination
Standards - National
Standards - Occupational
Standard Setting
Standards - Training
Sub-task
Supporting Knowledge & Abilities

T

Task
Task Analysis
Technical Training
Trade
Trade Advisory Board/Committee
Trade vocational
Trades Qualification
Trade qualifier
Train-the-Trainer Program
Training
Training Course
Training Delivery Method - Block Release
Training Delivery Method - Individualized
Training Institution
Training Manual
Training Standards
Transferable skill

U

Unit
Unit Outline

V

Validation
Vocational Counselling
Voluntary Certification

Term definitions

A

Ability

Expertise in performing successfully a task or set of tasks. This expertise may have been acquired with or without formal training or study and may be related to a specific trade, occupation, or profession. It may be measured using various instruments.

Academic Qualifications

Requirements for entry into a designated trade that involves a period of formal study in a recognized educational institution or equivalent. In most circumstances academic qualifications can be documented.

Accreditation

A process by which a government department, agency or association grants public recognition to training program that meets a predetermined set of standards.

Apprentice

A person who works in a trade, occupation or craft under an agreement or contract and is registered with the Apprenticeship Authority. The apprentice learns the knowledge, skills, tools and materials of the trade, occupation or craft through on-the-job training and technical instruction under the supervision of a certified journeyperson.

Apprentice On-the-Job Training Standards / Progress Record Book (Logbook)

A document issued to registered apprentices in which acquired skills, courses completed, and time worked at a trade or occupation are recorded.

Apprenticeship

A structured system of supervised training leading to certification in a designated trade, occupation or craft. It is systematic programs of on-the-job training supplemented by technical instruction in which an apprentice gains experiential learning and develop skills.

Apprenticeship Accreditation

A process by which an agency or association grants public recognition to a training establishment, program of study or service which meets pre-determined standards.

Apprenticeship Advisory Board – Provincial / Territorial

A provincial or territorial government appointed Board whose primary function is to advise the Minister responsible for labour market matters on issues related to training and certification of people in designated trades.

Apprenticeship Contract / Agreement

A document signed by the employer, sponsor, or joint apprenticeship training committee and apprentice, outlining the conditions and responsibilities of both parties to the terms of apprenticeship. The agreement may be co-signed by the government department or

	agency that has responsibility for the *Apprenticeship Act* and regulations.
Apprenticeship Program Outline	A list of topics and performance objectives to be learned during each period of an apprenticeship program's technical training.
Apprenticeship Registration	A formal process requiring an individual to meet all the requirements for apprenticeship, including signing an apprenticeship contract, agreement or memorandum of understanding with an employer.
Apprenticeship Technical Training	A period of training/instruction provided to apprentices in a classroom setting away from the job site. The emphasis is on teaching the theory component of the trade or occupation, reinforced where appropriate, with shop/lab training. This training is intended to supplement the on-the-job training.
Apprenticeship Term	The normal length of time required for a person to attain journeyperson status from the time of registration as an apprentice and is usually a combination of both formal training and work experience. The length of time is generally expressed in years and hours per year or in hours.
Apprenticeship Training	Industry training that combines work-based training and experience with components of technical training leading to provincial/territorial and/or national industry training credentials (e.g. Red Seal) for trades-related occupations.
Assessment	The process of reviewing and evaluating competencies and qualifications for the purpose of determining whether or not a candidate has fulfilled the requirements to be eligible to practice an occupation. This process could include testing or examinations. The main purpose is to measure candidates against a pre-determined occupational or educational standard.
Assessment criteria	A standard of performance that a learner must reach in order to demonstrate the achievement of a specified element of learning.

B

Basic Skills	A minimum level of essential technical skills required to work in a trade to become an apprentice, and upon which proficiency in the trade is built.
Block Release Training	A method by which apprentices are released by their employers to attend technical training for a specified period (block) each year, usually five to eight weeks.
Bridging Program	A program of study, a course, or set of courses or activities designed specifically to provide practitioners from one jurisdiction with the skills and knowledge required for entry into a trade or profession in another jurisdiction. A bridging program is an example of an accommodation mechanism that complements the competencies or qualifications earned outside the jurisdiction.

C

Canadian Apprenticeship Forum (CAF)	The Canadian Apprenticeship Forum - Forum canadien sur l'apprentissage (CAF-FCA) is a diverse, not-for-profit organization that brings together the key participants who make up the Canadian

	apprenticeship community. This dynamic partnership works within the Canadian labour market and strives to make a difference within that community.
Canadian Council of Directors of Apprentice- ship (CCDA)	A national body comprised of the provincial and territorial government officials responsible for managing and directing apprenticeship programs and two federal government representatives. The mission of the Council is to facilitate the mobility of the apprentices and journey-persons in Canada through the establishment of uniform standards in training and examinations as confirmed by a Red Seal endorsement.
Certificate of Apprenticeship	A document issued to a person who has successfully completed a formalized apprenticeship training program.
Certificate of Qualification	A certificate issued to a candidate who has successfully completed an apprenticeship program or has met all the requirements of a trade *and* has attained the prescribed pass mark on the certification examination to qualify as a journeyperson in that trade.
Certificate of Qualification Examination	Standardized provincial or territorial exam that is normally written upon completion of an Industry Training Program. The successful completion of this exam leads to the issuance of a provincial or territorial Certificate of Qualification.
Certification	The acquisition of a Certificate of Qualification.
Challenge Exam	A method of assessment to award credit for previously acquired learning. It measures learning through a variety of written and non-written evaluation methods, including examinations and demonstrations.
Challenge / Exemption	An authorization exempting someone from a normal requirement.
Common Core	The tasks in a National Occupational Analysis that have been identified by the industry as being performed by workers in at least 70 percent of the provinces and territories that have the trade or occupation designated for apprenticeship under the Interprovincial Standards Red Seal Program.
Common Sequencing	The arranging of learning materials in an order for delivery by a number.
Community College	A post-secondary educational institution offering programs related to liberal arts, technical and trades training (including pre-apprentice pre-employment and in-school technical training for apprentices).
Competency	A measurable level skill, and/or knowledge to perform occupation-specific tasks and duties.
Competency Assessment	Measurement of skills, knowledge, and behaviours obtained through formal or non-formal education, work experience, or other means, with the purpose of establishing individual's possession of requirements for a trade or profession. Competency assessments may be in the form of examinations or task-based performance testing.
Competency-Based Learning	Training aimed at acquiring discrete sets of associated task-based skills and knowledge that, in combination, make up the performance requirements of an occupation, profession, or trade.

Competency Profile	A curriculum component that graphically and logically delineates an occupation into a performance-based framework comprising major duties, tasks, and sub-tasks. Competency profiles are typically developed with input from practitioners who work in the occupation.
Completion of Apprenticeship	The fulfilment of training requirements, both technical and on-the-job, by registered apprentices. Graduates of an apprenticeship program applicable to the trade and the province and territory will be issued a Certificate of Apprenticeship. In most cases, they will also receive a Certificate of Qualification.
Compulsory Apprenticeship	A requirement in which people entering or working in a designated trade must possess a Certificate of Qualification or register as apprentices with the provincial or territorial authorities. Those working in the trade prior to the compulsory requirement may be exempted by provincial or territorial legislation.
Compulsory Certification	A requirement in which people entering or working in a designated trade must possess a Certificate of Qualification or be registered as apprentices in order to practice in the trade. See also ***Voluntary Certification***.
Continuing Competence	The ability over time to integrate and apply the knowledge, skills, judgment, and personal attributes required to practice an occupation safely and ethically. Occupational bodies may require members to verify that they have met continuing competence standards.
Cooperative Education	A program for those enrolled in a school or community college who, through a cooperative arrangement between the training institution and employers, receives part of their instruction in the institution and part on-the-job through an employment agreement.
Core Curriculum	The portion of a curriculum developed to the occupational tasks common to a specific trade in the provinces and territories.
Correspondence Study	A systematic method of distance learning or training consisting of a series of sequentially organized lessons or assignments conducted and maintained through the postal service, electronic mail or a similar service.
Course	A single unit of study offered by educational institutions.
Course Outline	A brief description of the objectives, content and application of a specific program of study. It outlines the material to be learned in major, minor and unit groups in sufficient detail to ensure an understanding of the scope of the program. It may also include an evaluation profile.
Credentialing	Pertaining to the recognition of qualifications through the issuance of formal documentation.
Criterion	An objective and measurable indicator relating to skill level, knowledge, and/or competency.
Curriculum	A structured outline of learning organized into course(s) or work experiences that assist in the development of learners' knowledge and skills. It is a comprehensive term that includes such elements as task analyses, competency profiles/charts, course outlines, learning/teaching objectives and lesson plans.

Curriculum Resources Resource materials developed to establish the standards for and facilitate the training of apprentices and journeypersons. Resource materials include, but are not limited to, skill profile charts, occupational analyses, apprenticeship program outlines, journeyperson upgrading and updating course outlines, trade/occupation manuals and modularized learning resource materials.

D

DACUM An acronym for 'Developing a Curriculum', a model used in competency-based training for developing the learning activities that generate specific skills required by an occupation.

DACUM Chart A listing of skills or competencies in a specific trade or occupation organized and presented in a chart format. The list is prepared using the DACUM (developing a curriculum) method for analyzing a trade or occupation. DACUM involves bringing together practitioners of a trade under the leadership of trained facilitator.

Day Release Training Technical training for apprentices where employers release apprentices from work for one day to attend in-school training (usually one day a week).

Designated Apprenticeable Trade A trade that has been formally recognized through provincial or territorial legislation for apprenticeship training and certification. The requirements for in-school and on-the-job training as well as level and certification examinations are outlined in the trade regulations.

Designated Red Seal Trade A trade or occupation that has been designated by the Canadian Council of Directors of Apprenticeship (CCDA) for inclusion in the Interprovincial Standards "Red Seal" Program. The training and certification is based on a national occupational standard, and provinces and territories participating in the program for that trade or occupation are permitted to affix a Red Seal to the certificates of candidates who meet the standard. Refer also to the definition herein for Interprovincial (IP) Examination.

Discontinuer An apprentice who terminates involvement in an apprenticeship training program prior to completion.

E

Education Level - Trade/Vocational Trade/vocational training includes pre-employment or pre-apprenticeship and skill upgrading courses lasting three months or more, but does not include block release apprenticeship training, basic training for skill development, language training and job readiness training.

Education/Entrance Requirements The level of formal education or other criteria such as an examination or assessment process that an individual must possess prior to becoming an apprentice or attending technical training. While these requirements may vary from trade to trade and province to province, Canadian Council of Directors of Apprenticeship (CCDA) advises that most employers require prospective apprentices to have a grade 12 education.

Employer A person, corporation, partnership, unincorporated association, or a municipal, provincial or other public authority eligible to sign an Apprenticeship Agreement with an apprentice.

Entrance Requirements A set of criteria stipulating length, level, and scope of education, or other types of training, or experience, for eligibility to enter an academic institution, trade, or profession. May include stipulated minimal levels or achievement and/or minimal scores on examinations.

Equivalency In the context of industry training refers to the process of demonstrating that an individual has completed a requirement of an *Industry Training Program* outside of the traditional program. This may include demonstrating the equivalent of a specified number of work hours related to the program, or demonstrating the completion of technical training equivalent to a technical training component of an Industry Training Program.

Essential Skills Essential Skills are the "enabling skills" that help people perform the tasks required by their occupation and other activities of daily life. They provide people with a foundation to learn other skills, and enhance their ability to adapt to workplace change. Essential Skills include: reading text, document use, writing, numeracy, oral communication, thinking, working with others, computer use and continuous learning.

Examination Item Bank A collection or inventory of validated examination questions.

Examination Plan An outline of specifications or proposed content of an examination. The plan is based on a National Occupational Analysis and will reflect the importance, frequency and complexity of tasks performed in a trade or occupation.

Examination Standards A set of established standards for a trade and that meet provin-cial or interprovincial criteria. They include:

a) occupational standards;

b) acceptable development criteria and administrative procedures; and,

c) other factors that contribute to quality examinations.

F

Fixed Entry/Open Exit Training A system of training based on specific performance criteria where progress in learning is measured in terms of demonstrated skills and knowledge and where an apprentice or other learner is allowed to progress through and exit a course of instruction at a rate determined by his or her own capabilities. This training system is also referred to as the Modified Block Release training system. Learning is usually supported by the use of modularized learning resource materials and the services of a facilitator/instructor.

Flexible/Distance Education Formal training delivery methods that enable registered apprentices and other learners to complete a course of study utilizing current communications technologies and may include some traditional classroom-based instruction. Some examples of current communication technologies being utilized to reduce the periods of formal classroom instruction include the Internet, interactive computer-based training and video teleconferencing.

Forum of Labour Market Ministers (FLMM)

A forum comprised of the provincial/territorial, ministers and the federal minister with responsibility for reviewing work and setting priorities for federal-provincial/territorial and interprovincial cooperation on labour market issues. The forum is supported through a set of committees at various levels, including: ministers, deputy ministers, senior officials and working groups.

Funding for Apprenticeship Training

The costs associated with the training of an apprentice. Wages are paid during the on-the-job period by the employer. The cost of the technical portion of training is, in most cases, shared between the provincial or territorial government and the federal government, while in others they are paid in total by one party. Employers and apprentices contribute to the cost of institutional training.

G

Grandparenting (Acquired Rights)

The recognition of a person's work experience in a trade prior to the trade being designated for training and certification or a designated trade being declared for compulsory certification. The recognition may be in the form of granting the Certificate of Qualification without examination, a permit to work at a trade for a specified or indefinite period or other forms that permit the person to continue working in the trade in the same capacity as before its designation or certification.

H

Hour Release Training

Technical training for apprentices whereby they are released from work by their employers to attend technical training for a number of hours per day, usually one day a week.

Human Resources and Social Development Canada (HRSDC)

This is the Federal Department that has responsibility for providing the secretariat services for the Interprovincial Standards (Red Seal) Program including the translation, printing and distribution of interprovincial examinations. The department is also responsible for the development and distribution of National Occupational Analyses.

I

Individualized Instruction

Instruction focused on a single learner (as opposed to a group of learners) and considerers the learner's existing skills, abilities, needs, learning preferences and rate of learning. Individualized instruction is usually accomplished through modular delivery of training.

Industry Trade Advisory Committee

Committee appointed to represent the interests of an equal number of employers and labour, on a committee off designated by a provincial or territorial agency, to offer advice and make recommendations regarding apprenticeship and journeyperson training and certification standards. Representatives are knowledgeable in the trade or occupation and are seen as the primary vehicle for ensuring industry has a voice in the development and delivery of apprenticeship training.

Industry Training

A broad strategy used to provide individuals with the competencies and attendant credentials required to work in industry. The defining features of industry training, within the context of the Industry Training Authority's (ITA) mandate, are: 1.Occupational

	competencies and standards for each occupation are **defined by industry** and approved (recognized and/or accredited) by the Industry Training Authority under the provisions of the Industry Training Authority Act; 2. Demonstration of defined competencies and standards by individuals results in the awarding of a **credential** by ITA and/or its designates; 3. The training methodologies, while varied and flexible, normally comprise a component of **work-based learning and/or experience** that enables individuals to practically acquire and/or apply skills and knowledge.
In-School Training	A period of training/instruction usually provided to apprentices in a classroom setting. The emphasis is on teaching the theory component of the trade, and is intended to supplement on-the-job training.
Internship	A period of practical, supervised, on-the-job training designated to give the learner the required skills and knowledge for entry into a trade or profession, supplementing a period of formal study. An intern is an advanced student or recent graduate in a professional field who is getting practical experience under the supervision of an experienced worker.
Interprovincial Common Core Curriculum Standard (ICCCS)	The identification of standards within the technical training component of an apprenticeship program commonly accepted across jurisdictions.
Interprovincial Computerized Examination Management System (ICEMS)	A system intended to manage the inter-provincial standards Red Seal examination development process, Computer technology is used to store and selectively retrieve examination items from a bank, automate the process of examinations and track examination candidates.
Interprovincial Red Seal Examination	A standardized interprovincial examination available in a Red Seal trades. The successful completion of an Interprovincial Red Seal Examination leads to a Red Seal endorsement which is affixed to the provincial Certificate of Qualification.
ICEMS Steering Committee	A committee comprised of representatives with involvement in the In-terprovincial Standards Red Seal Program whose mandate is to oversee the development and implementation of the ICEMS initiative.
Interprovincial Standards Examination Committee (ISEC)	A working group of the Canadian Council of Directors of Apprenticeship (CCDA) comprised of staff responsible for the development of certification examinations within the provinces and territories. It includes two representatives from the federal department of Human Resources and Social Development. ISEC oversees the development and administration of interprovincial examinations.
Interprovincial Standards Red Seal Program	A program designated to bring together provincial, territorial and federal governments to achieve increased workforce mobility by establishing common standards for certification in individual trades and occupations. Elements of the program are the National Occupational Analyses and the interprovincial examinations. The program is complementary to provincial and territorial certification programs and administered by the Canadian Council of Directors of Apprenticeship (CCDA). It is also referred to as the Red Seal Program.

J

Journeyperson — A formally certified, fully skilled worker whose combined work experience and training satisfy all the requirements demanded of those who practice in a designated trade.

Journeyperson Certification Only — A provision of prevailing provincial/territorial legislation that provides for the certification of persons at the journeyperson level only but makes no provision for the registration and training of persons as apprentices. This provision is often incorporated to reduce barriers to the mobility of qualified workers.

Journeyperson Certification – Compulsory — A prevailing provincial/territorial legislation requirement in which persons entering or working in a designated trade or occupation must possess a Certificate of Qualification or be registered as apprentices, in order to work or practice in that trade or occupation. Those working in the trade or occupation prior to the compulsory requirement may be eligible for exemption from this requirement by the provincial/territorial authorities. In some jurisdictions, the Certification Program is referred to as the Trades Qualification (TQ) Program.

Journeyperson Certification – Voluntary — A provision of prevailing provincial/territorial legislation that provides a voluntary opportunity for eligible journeypersons working in a specific designated trade or occupation to become certified. In some jurisdictions, the certification program is referred to as the Trades Qualification (TQ) Program.

L

Labour Market — An expression of the interaction that occurs between the supply of labour by the potential workers and the demand for workers by employers.

Legislation – Apprenticeship — The provincial and territorial Acts and Regulations governing the administration of apprenticeship and related programs, including the training and certification of apprentices and tradespersons.

Licence — Document entitling its holder to have the exclusive right to practice a trade or profession, and signifying that the licence-holder meets competency and other requirements for practice.

Licensing — Some "licensed" professions may only be practiced by holders of a licence in the specific field of practice. A licence is required to perform procedures reserved for members of the licensing body. A licence signifies that the regulatory body has examined the holder's credentials and that the holder meets the standards established by it and has undertaken to comply with and apply the standards in force in the profession, occupation, or trade. A licence also entitles the holder to use a reserved title.

Licensing, Certification or Registration — A formal recognition that a person has attained a standard of proficiency in a set of knowledge, skills and abilities required to practice a trade or occupation.

Licensure — Procedures for determining eligibility, granting licences, and protecting the public with respect to the practice of the trade or profession requiring a licence. Licensure denotes to the public that

the person who has been granted the licence has the competence needed to provide for the public's protection.

Linkages / Credit — The relationship between training courses and programs in high schools, community colleges and technical institutions and the apprenticeship program. The programs are linked to permit the granting of apprenticeship credits for skills and knowledge acquired prior to enrolling in apprenticeship. See also **Prior Learning Assessment and Recognition (PLAR)** and **Accreditation.**

Logbook — A booklet issued to registered apprentices in which acquired skills, knowledge and time worked at a trade are recorded. The name given to the book may differ between provinces and territories.

M

Maintenance — The process of renewing standards, updating curricula and upgrading professional/occupational training of certificate and licence holders for the purposes of keeping their professional and occupational practice and standards current.

Mentorship — A service associated with educational programs and licensing/registration processes, through which individuals obtain ongoing advice and assistance from persons experienced in their field of study or occupation.

Modular Training — A training program organized and delivered in distinct units or clusters of related materials. The modular training concept allows for individualized instruction and learning, and flexible completion times for apprentices. Competency or performance-based training programs use the modular concept in the organization of units of instruction.

Modularized Learning Resource Materials — Educational packages which include learning objectives, learning activities and self-assessment procedures designed to guide the learning of apprentices and journeypersons for a specific unit of training. Packages may be developed for use in individualized and/or instructor/facilitator driven settings and for apprentice training and/or journeyperson upgrading/updating.

Module — A self-contained unit of instruction that focuses on a single competency to be learned. Modules are normally used in self-paced instructional programs.

Mutual Recognition — Acceptance by appropriate authorities in two jurisdictions that the qualifications of their workers in a given occupation conform to one another's occupational standard without requiring the worker to undergo any additional assessment or training.

N

National Occupational Analysis (NOA) — A document that details tasks and sub-tasks performed by workers in a trade or occupation. The National Occupational Analyses for Red Seal trades are developed by industry practitioners, under the guidance of the federal government and with the assistance of the provinces and territories. The National Occupational Analysis is used as the base document to develop an interprovincial Red Seal examination. The CCDA recognizes the occupational analysis as the national standard for the occupation.

National Occupational Classification (NOC) A document that classifies all occupations in Canada. This system of coding is the basis for the organization of occupations in Job Futures.

National Standards A set of standards that are established for Canada through a system of national occupational analyses developed by the industry in association with the provincial, territorial and federal governments. They permit standardization of training and certification programs, and the mobility of tradespersons.

O

Occupation A set of skills that, with some variation, are similar in their main tasks or duties or in the type of work performed. The skills that comprise an occupation are considered together for the purposes of classification or setting of standards. The definition of an occupation may differ between provinces and territories in Canada or between countries.

Occupational Mobility When, for whatever reason, an individual moves from one job to another without experiencing an extended period of unemployment.

Occupational Qualifications Occupational qualifications mean the knowledge, skills, abilities and experience of an individual.

Occupational Requirement Occupational requirement means a condition other than an occupational standard, imposed by a recognized body for the practice of an occupation.

Occupational Standard Occupational standard means the skills, knowledge and abilities required for an occupation as established by a recognized body and against which the qualifications of an individual in that occupation are assessed.

On-the-Job Training The component or portion of an apprenticeship training program where apprentices spend time working on the job site learning the skills of the trade under the supervision of a journeyperson.

P

Performance-Based Training See ***Competency-Based Learning*** Performance criterion

Period of Articling / Internship A period of practical, supervised, on-the-job training designed to supplement a period of formal study and give the practitioner the required skills and knowledge for entry into a trade or profession.

Portfolio A formally presented document that describes learning achieved from prior experience, articulates learning objectives toward the specific course requirements of an educational institution or professional association or the requirements of an employer, and shows validation or proof through third-party documentation.

Practical Training The part of apprenticeship training in which an apprentice works on a job site learning the skills of a designated trade under the supervision of a certified journeyperson.

Practical Training Record Book	A component of the Apprentice Portfolio used to record tasks, sub-tasks and practical skill development verified by a certified journeyperson, or designated trainer, and reviewed by the Apprenticeship Training Coordinator.
Pre-Apprenticeship Training	A program mainly of technical and general education, including a portion of trade practice, offered in high schools, vocational schools, community colleges and technical institutes and linked to an apprenticeship program through the credit system.
Pre-Employment Training	Courses providing intensive instruction for entrance into employment in a specific occupation. Depending on the jurisdiction, these courses may not necessarily be linked to apprenticeship training. In some jurisdictions, however, this term refers to all training leading to employment, including pre-apprenticeship training courses.
Pre-Employment Training – Compulsory	A compulsory pre-employment training course that must be completed prior to participating in an apprenticeship program for a specific designated trade or occupation.
Pre-Employment Training – Voluntary	A pre-employment training course that can be taken on a voluntary basis and is not a prerequisite to entering into an apprenticeship program in a specific designated trade or occupation.
Prerequisite	A level of competence or education required by a person for entrance to an apprenticeship program and to succeed in the subsequent levels of the program.
Prior Learning Assessment and Recognition (PLAR)	A process under which recognition is extended towards completion of an apprenticeship for skills, knowledge or competencies that have been acquired experientially through work experience, previous education and training or self studies. The prior learning should articulate with the formal technical training or on-the-job training requirements for the trade or occupation in which the apprenticeship is to be served.
Professional Development	Studies completed by individuals to enhance knowledge and skills in their fields of practice.
Program Development Officer	A person in a jurisdiction who is respon-sible for developing and evaluating occupational training and certification programs, including interprovincial and other examination. In some jurisdictions, these people are called Curriculum and Examination Development Officers.
Program Standards	Expectations of performance and achievement for certification in a particular trade. These standards include pass marks, quality assurance, program progression criteria and certification criteria.
Provincial Trade Advisory Committee (PTAC)	The mandate of the Provincial-Territorial Advisory Committee is to advise and make recommendations to the Council on matters related to voluntary standardization and to promote cooperation and communication between the provinces, the territories and the Council (Standards Council of Canada — SCC).

Q

Qualification — Possession of set(s) of skills and knowledge for entry into an occupation or an educational institution, or for practice of a profession or occupation.

R

Ratio — The number of apprentices a journeyperson is permitted to supervise. The procedure for establishing ratios may vary between jurisdictions, for example, the ratio may be set by regulation under the *Apprenticeship Act*, by the Apprenticeship Board or by individual trade advisory committees or boards. Ratios will vary from trade to trade and, in the absence of an established ratio, a ratio of one apprentice to one journeyperson is used.

Ratio – Journey-person/ Apprentice — The number of qualified/certified journeypersons that an employer must employ in a designated trade or occupation in order to be eligible to register an apprentice as determined by prevailing provincial/territorial legislation, regulation, policy directive or bylaw issued by the responsible authority or agency. Ratio may be fixed for all employers or variable and can be adjusted by the responsible authority when taking into account an employer's ability to train. Generally, in the absence of an established ratio, a ratio of one apprentice to one journeyperson is used.

Recognized Training Programs — Programs that have been approved pursuant to a bylaw by the Industry Training Authority Board of Directors and lead to a Certificate of Qualification.

Red Seal — A nationally registered trademark symbol adopted for the Interprovincial Standards Program to signify interprovincial qualification of tradespersons at the journeyperson level. It is affixed to the provincial and territorial Certificates of Apprenticeship and Qualifications of those apprentices and tradespersons who have met the national standard in a Red Seal trade. The Red Seal is a passport that allows the holder to work anywhere in Canada without having to write further examinations.

Red Seal Designated Trade — A trade that has been designated by the Canadian Council of Directors of Apprenticeship (CCDA) for inclusion in the Interprovincial Standards Program. The training and certification are based on a national occupational standard, and provinces and territories are permitted to affix a Red Seal to the certificates of candidates who meet the standard.

Registered Apprentice — A trainee who has met all the requirements for entrance into an apprenticeship program and who has signed an apprenticeship contract or agreement with an employer, sponsor or joint apprenticeship training committee. The term registered is now regularly being substituted for indentured.

Regulations — The formal rules by which the principles outlined in provincial and territorial Acts governing apprenticeship training are to be carried out. Each designated trade may have a set of regulations covering all aspects of training and certification.

Retraining — The training for the acquisition of new knowledge and skills related to a trade other than for which a person was originally trained.

S

Scope of a Trade — The range or extent of skills required or tasks performed in a particular trade or occupation.

Sector Council — An organization that represents an industrial sector in terms of occupations, productivity, and viability of the industry.

Self-Paced Learning — The acquiring of knowledge and skills at a pace suitable to the individual learner.

Sequencing of Curriculum — The arranging of learning materials in a logical order for training activity.

Skill — The ability to perform tasks with a specific degree of proficiency.

Skill Level — A designation used to classify occupations in the National Occupational Classification by the level of training, education or experience required to perform an occupation.

Skill Profile Chart — A comprehensive portrayal of the major trade areas and associated tasks for a trade or occupation which an individual must successfully perform to meet job requirements. The profile may be presented in a graphical format e.g., DACUM chart or a narrative format.

Skill Type — A designation used to classify occupations in the National Occupational Classification by the industry or sector in which the majority of the occupations fall.

Skill Updating — The training required to bring a person's skill or set of skills up to date with new methods, technology and procedures required in the trade or occupation in which the person is currently employed or certified.

Specialization — A situation in which a person's training or work in a trade is concentrated or focused on a segment of the trade.

Sponsor — A person or body registered with the Industry Training Authority willing and able to ensure the trainee receives training and related practical experience in the tasks, activities and functions that are carried out in that occupation, and undertakes to attest that the trainee has met the established standards for the Industry Training Program.

Standard — A written description of characteristics which are deemed to be required by users of the standard. A standard serves as a benchmark or point of comparison and it allows the determination of the variability and quality of a product, process or service.

Standard Setting — The process of identifying the pertinent tasks, knowledge, and/or skills within an occupation, profession, trade, sub-specialty, etc., and establishing uniform achievement levels in the performance of those tasks.

Sub-Task — The smallest unit of the Occupational Analysis into which it is practical to divide any work activity. The complete set of sub-tasks and supporting knowledge and abilities describes a "Task".

Supporting Knowledge and Abilities	The element of skill and knowledge that an individual must acquire to adequately perform the task.

T

Task	A work activity that is distinct, observable, performed within a limited period of time, and which leads to a product, service or decision.
Task Analysis	A systematic process of identifying and listing job tasks and analyzing the behaviour required to carry out a task with a view to identifying areas of difficulty and the appropriate training techniques and instructions necessary for successful learning.
Technical Training	The part of an apprenticeship training program that is delivered in-school, and includes theoretical aspects of the trade designed to supplement the skills acquired during on-the-job training. It makes up approximately 15 percent of the total apprenticeship training program.
Trade	An occupation for which a provincial or territorial apprenticeship program is available. Trade skills can best be learned through an apprenticeship.
Trade Advisory Board / Committee	A provincial or territorial group appointed to advise and make recommendations regarding apprenticeship training and certification in a designated trade. It is comprised of persons knowledgeable about the trade. Normally, an equal number of employee and employer representatives are appointed to a committee. Some jurisdictions have a single provincial or territorial for each trade, others have local or regional trade advisory committees in addition to the provincial committee. These committees are the primary vehicles for ensuring that the industry has a voice in the development and delivery of apprenticeship programs.
Trade Vocational	Higher level of education that may or may not require the completion of high school and may involve on-the-job training as part of the course requirements.
Trades Qualification	A process of Certification which recognizes workers with a minimum number of years and hours of documented experience in a trade. Workers can apply for certification and write a certification exam for trades qualification.
Trade Qualifier	A Trade Qualifier is an individual who has amassed sufficient practical work experience to meet the established criteria to attempt the certification journey level (provincial or interprovincial) examination. The criteria require relevant on-the-job experience of at least one year in excess of the apprenticeship term.
Train-the-Trainer Program	A program designed to provide training and coaching skills to journeypersons responsible for the workplace training and supervision of apprentices.
Training	The acquisition of knowledge or skills by the performance of tasks under the direct supervision of a person who has already acquired the knowledge or skill. Training can occur on the job or in a formal setting.

Training Course

A period of on-the-job practical training, usually supervised, within a compulsory program of technical or vocational training. May be required in addition to general qualifications for access to a trade, occupation, or profession. May constitute additional training or retraining.

Training Delivery Method – Block Release

Refers to a training delivery method by which apprentices are released from work by their employers to attend prescribed full time in-school technical training for a specified period (usually three to ten weeks, once each year).

Training Delivery Method – Individualized

A single learner focused (as opposed to a group of learners) method of providing apprenticeship technical training instruction utilizing current communications technologies and/or a facilitator/instructor in a classroom, shop or lab. Jurisdictions that are moving to an individualized course method of instruction will show only the total hours of training as opposed to a number of periods and total weeks of instruction. Modularized learning resource materials are often used to support this type of training delivery.

Training Institution

A public or private college or post-secondary institute that provides training services.

Training Manual

A guide for the use of training staff, showing in detail the subject areas and behavioural objectives to be achieved, methods of instruction, equipment and materials to be used, the form of records to be kept and the tests to be administered.

Training Standards

A set of standards set within a trade or occupation to ensure apprentices receive training that will lead to certification at the journeyperson level. They include:

a) **standards of in-school instruction**

- i) qualifications of instructors;
- ii) program development;
- iii) training aids, models and equipment;
- iv) facilities;
- v) ratio of apprentices to in-structors; and,
- vi) other factors that contribute to quality training.

b) **standards of on-the-job training**

- i) qualifications of trainer;
- ii) variety and level of work available to the apprentice;
- iii) facilities and equipment;
- iv) monitoring of training by apprenticeship field staff;
- v) ratio of apprentices to journeypersons; and,
- vi) other factors that contribute to quality training.

Transferable skill

Skills acquired through various employment, volunteer and academic experiences that can be applied from one position to another.

U

Unit — The basic component of technical training in a given trade. It may provide specific technical or complementary content that is delivered and completed in its entirety within one level of training.

Unit Outline — A document that lists unit learning objectives, detailed content and exam plans.

V

Validation — A process whereby industry, under the guidance of Program Development Officers and through provincial and territorial trade advisory boards/committees, reviews and confirms relevant program material (e.g., occupational analyses and examinations) for validity, content and accuracy.

Vocational Counselling — Engaging in career planning with individuals through a process of informing them about various opportunities for education, training and work.

Voluntary Certification — A situation in which certification is available in a designated trade, but there is no legislated requirement that apprentices in a trade should be registered, or that workers engaged in the trade should be certified journeypersons.

Appendix 3: Survey methodology

The National Apprenticeship Survey (NAS) of 2007 is a cross-sectional survey designed to collect data directly from Canadian apprentices. These apprentices were contacted by Statistics Canada between January and May 2007 and responded to a telephone survey conducted on a voluntary basis. It should be noted that the sample represents three specific types of apprentices and not the entire apprentice population and the survey results provides a cross section—a snapshot of all the groups at one point in time.

Target population

For the NAS, a selected person was considered in scope for the survey if he or she had engaged in some apprentice activities between 2000 and 2004. The NAS targeted registered apprentices in the ten provinces and the three territories based on their apprenticeship status and thus are not representative of all apprentices. The three groups of apprentices targeted were:

Completers: were identified as such by the 12 jurisdictions[1] and refers to those who had completed their apprenticeship program in either one of the reference years 2002, 2003 and 2004 and were not registered in any apprenticeship training as of December 31st 2004.

Discontinuers: were identified as such by the 12 jurisdictions[2] and refers to those who had stopped their apprenticeship program in either one of the reference years 2002, 2003 and 2004 and were not registered in any apprenticeship training as of December 31st 2004.

Long-term continuers: were defined as active apprentices as of December 31st 2004 who registered as apprentices before the year 2000 and who had been registered for more than one and a half the prescribed duration time required to complete their apprenticeship programs in the same trade as 2004. Approximately 19% of the 2004 continuers were long-term continuers

Excluded from the target population are apprentices who were registered in any apprenticeship training as of December 31st 2004 and who had within the normal bounds of the prescribed duration for their training. This group represents 81% of all continuers as of 2004.

1. Nunavut data was unavailable for the survey.
2. Nunavut data was unavailable for the survey.

The target population was first determined at the stage of frame creation using the definitions above. During data collection, individuals were asked to confirm their apprentice activities as of 2000 and 2004. If their confirmed apprenticeship status did not fall within one of the three target population groups they were considered out-of-scope for the survey.

Sample frame

The survey sampling frame was based on lists of registered apprentices provided by the provincial and territorial jurisdictions for the targeted reference years (2002, 2003 and 2004). These lists contain all necessary information needed for the stratification and selection of the sample such as the status of the apprentice, registration year, trade or training program, apprentice's age and gender. As well, contact information was provided such as the apprentice's address and phone number. A second source of contact information was also provided for some jurisdictions.

An assessment of the sampling frame was conducted to evaluate its coverage and the quality and uniformity of the information for the 12 jurisdictions that provided data. Linking of the apprentices from the three reference years was necessary in order to classify each apprentice in the right status group (long-term continuers, completers or discontinuers) and also to eliminate duplicates within and across jurisdictions.

Table A.3.1
Number of apprentices on frame by jurisdiction and frame status

	Frame status			
	Long-term continuers	Completers	Discontinuers	Total
Reporting jurisdictions	number	number	number	number
Newfoundland and Labrador	2,430	545	2,255	5,230
Prince Edward island	5	315	45	370
Nova Scotia	730	1,245	1,110	3,085
New Brunswick	365	1,300	1,295	2,960
Quebec	12,030	7,740	12,085	31,850
Ontario	19,650	14,410	13,740	47,795
Manitoba	530	2,160	1,635	4,325
Saskatchewan	510	2,390	2,005	4,905
Alberta	1,800	14,240	13,005	29,045
British Columbia	310	6,815	8,190	15,315
Yukon	35	65	85	190
North West Territories	20	110	180	310
Canada	**38,405**	**51,340**	**55,630**	**145,375**

Note: numbers have been rounded to the nearest five.

Sample design

Three variables were used for the stratification of the survey sample: jurisdiction, apprentice status and main trade groups. There were 12 jurisdictions, three apprentice statuses, and 7 main trade groups. These variables produced a total of 231 strata.

A national sample size of at least 30,000 respondents was necessary to provide reliable estimates for each stratum. A minimum sample was allocated to each stratum and the remaining sample was allocated proportionally to the number of apprentices in each stratum. In several strata, a census of apprentices was selected. Moreover, in small provinces and territories, it resulted in selecting a census of apprentices for this jurisdiction.

Within each stratum, a random sample of apprentices was selected. The sample was allocated in seven steps. First, the sample was allocated by final status (expected status at time of collection), then by frame status. Third, allocation of a minimum number of cases by stratum took place followed by determining take-all strata. Fifth, proportional allocation of the remaining cases was applied. Adjustments for tracing and response rates and augmentation for cases with no useful contact information were the two last steps done when allocating the sample.

Shown in the table below is the total number of cases allocated by jurisdictions and frame status, sent to the different regional offices of Statistics Canada to do the survey. It is from this collection sample that the targeted sample of 30,000 respondents is collected in order to reach a minimum precision for all domains of interest (aim of a CV of 33.3% for an estimated proportion of 10% in as many strata as possible and approximately to a CV of 16.6% for an estimated proportion of 25%).

Table A.3.2
Collection sample size by jurisdiction and frame status

Jurisdictions	Long-term continuers	Completers	Discontinuers	Total
	number	number	number	number
Newfoundland and Labrador	1,435	**545**	1,965	3,945
Prince Edward Island	**5**	**315**	**45**	370
Nova Scotia	**730**	**1,245**	**1,110**	3,085
New Brunswick	**365**	**1,300**	**1,295**	2,960
Quebec	2,855	3,180	4,820	10,850
Ontario	4,510	5,635	5620	15,760
Manitoba	**530**	1,335	**1,635**	3,500
Saskatchewan	**510**	1,410	**2,005**	3,925
Alberta	1,080	5,515	5,305	11,900
British Columbia	**310**	3,035	3,770	7,110
Yukon	**35**	65	**85**	190
North West Territories	**20**	110	**180**	310
Canada	**12,375**	**23,700**	**27,830**	**63,905**

Notes: The bolded print figures represent a take-all cell.
Numbers have been rounded to the nearest five.

A much higher than expected out of scope rate was observed in some strata during the first half of collection, consequently, it was decided to add sample to make up for the expected loss of respondents compared to the number expected before collection.

Table A.3.3

Allocation of the raw sample by jurisdiction after additional sample (based on the frame status)

Jurisdictions	Long-term continuers	Completers	Discontinuers	Total
	number	number	number	number
Newfoundland and Labrador	1,825	**545**	**2,250**	4,620
Prince Edward Island	**0**	**315**	**45**	365
Nova Scotia	**730**	**1,245**	**1,110**	3,085
New Brunswick	**365**	**1,300**	**1,295**	2,960
Quebec	3,615	3,180	4,820	11,610
Ontario	7,010	5,635	5,620	18,260
Manitoba	**530**	1,335	**1,635**	3,500
Saskatchewan	**510**	1,410	**2,005**	3,925
Alberta	1,080	5,515	5,305	11,900
British Columbia	**310**	3,035	3,770	7,110
Yukon	**35**	**65**	**85**	190
North West Territories	**20**	**110**	**180**	310
Total	**16,020**	**23,700**	**28,115**	**67,835**

Note: The bolded print figures represent a take-all cell.
The final number of cases sent to collection is 67,070.

Response rates

Survey response rates help to measure the effectiveness of the population being sampled and the collection process as well as being good indicators of the quality of the estimates produced. The table below shows the response rate at collection of NAS, at the national level as well as at the jurisdictional level.

Table A.3.4

Response rates by province and territory and frame status for National Apprenticeship Survey, 2007

Jurisdictions by frame status	Total sample size	Responding apprentices	Response rate at collection
	number	number	percent
Newfoundland and Labrador	**4,624**	**1,531**	**42.7**
Long-term continuers	1,826	652	46.3
Completers	544	365	71.0
Discontinuers	2,254	514	30.9
Prince Edward Island	**364**	**201**	**68.6**
Long-term continuers	2	1	100.0
Completers	317	178	69.8
Discontinuers	45	22	59.5
Nova Scotia	**3,084**	**1,818**	**73.1**
Long-term continuers	729	467	77.6
Completers	1,247	912	79.1
Discontinuers	1,108	439	60.0
New Brunswick	**2,960**	**1,696**	**66.2**
Long-term continuers	364	228	66.1
Completers	1,302	985	78.9
Discontinuers	1,294	483	49.9
Quebec	**11,612**	**5,815**	**63.2**
Long-term continuers	3,614	1,934	69.9
Completers	3,179	2,088	72.5
Discontinuers	4,819	1,793	50.4
Ontario	**18,261**	**7,237**	**49.2**
Long-term continuers	7,010	1,804	36.4
Completers	5,633	3,647	68.8
Discontinuers	5,618	1,786	40.2
Manitoba	**3,500**	**1,758**	**58.3**
Long-term continuers	528	279	62.3
Completers	1,336	922	71.8
Discontinuers	1,636	557	43.4
Saskatchewan	**3,925**	**1,918**	**55.1**
Long-term continuers	509	284	61.6
Completers	1,412	916	67.5
Discontinuers	2,004	718	43.3
Alberta	**11,900**	**5,534**	**50.8**
Long-term Continuers	1,079	700	67.0
Completers	5,517	3,333	62.5
Discontinuers	5,304	1,501	33.2
British Columbia	**7,112**	**2,860**	**45.8**
Long-term continuers	309	149	51.2
Completers	3,033	1,708	59.6
Discontinuers	3,770	1,003	32.5
Yukon	**189**	**78**	**44.1**
Long-term continuers	35	13	39.4
Completers	67	40	60.6
Discontinuers	87	25	32.1
Northwest Territories	**310**	**126**	**42.7**
Long-term continuers	19	4	22.2
Completers	112	63	57.3
Discontinuers	179	59	35.3
Canada	**67,841**	**30,572**	**53.7**
Long-term continuers	**16,024**	**6,515**	**52.6**
Completers	**23,699**	**15,157**	**67.7**
Discontinuers	**28,118**	**8,900**	**40.1**

Estimation and weighting

The principle behind estimation in a probability sample such as the NAS is that each person in the sample "represents", besides himself or herself, several other persons not in the sample. In order to have estimates produced from survey data being representative of the target population, a weight is given to each person who responded to the survey questions. This weight corresponds to the number of persons represented by the respondent for the target population. The weighting phase is a step which calculates, for each record, what this number is. This weight appears on the micro data file, and **must** be used to derive meaningful estimates from the survey.

For weighting purpose, this survey can be seen as a two-phase survey. The first phase corresponds to the selection of the sample and the responding units correspond to the second phase sample. The first phase weight is the inverse of the probability of selection of the apprentice. This first phase weight is then multiplied by a second phase adjustment factor. For the purpose of the second phase adjustment, response homogeneous groups (RHG) are created based on the characteristics of the respondents and the non-respondents. The adjustment factor is simply the inverse of the observed weighted response rate in each RHG.

For variance estimation, the two-phase approach of the Generalized Estimation System (GES) was used.

Data accuracy

While considerable effort is made to ensure high standards throughout the collection and processing of date, the resulting estimates are inevitably subject to a certain degree of error. There are two major types of error: non-sampling and sampling.

Non-sampling errors may result from frame imperfections and non-responses. A large proportion of apprentices (25.9%) in the sample were found to be out-of-scope (no apprentice activities during the target reference period) due to the frame imperfection. They were out-of-scope because they said they never been an apprentice or they had been an apprentice but not within the targeted reference years. Provincial/territorial out-of-scope rates ranged from 10% to 40%. The out-of-scope rate was 7.8% for completers, 35% for long-term continuers and 39.3% for discontinuers.

Table A.3.5

Out-of-scope rates by jurisdiction and frame status (calculated from resolved units only)

Frame jurisdiction	Long-term continuers	Completers	Discontinuers	Total
	percent	percent	percent	percent
Newfoundland and Labrador	38.5	7.5	52.8	39.9
Prince Edward Island	...	25.8	26.7	26.1
Nova Scotia	21.3	9.3	45.9	24.6
New Brunswick	7.6	5.0	40.0	18.8
Quebec	30.1	12.4	40.2	28.7
Ontario	52.4	8.2	39.0	32.5
Manitoba	22.0	5.1	38.1	21.2
Saskatchewan	14.1	5.5	31.9	18.6
Alberta	4.7	5.1	33.8	15.2
British Columbia	10.6	8.8	40.0	23.1
Yukon	13.3	2.4	25.7	13.2
Northwest Territories	20.0	3.0	16.2	10.3
Canada	**35.0**	**7.8**	**39.3**	**25.7**

... not applicable

There is an important coverage difference for Quebec in comparison to other provinces. In Quebec, almost only the construction trades are represented on the NAS frame. The list of apprentices for the construction trades was provided by "La Commission de la construction du Québec" (CCQ). Emploi-Québec (EQ) provided a list for 4 non-construction trades but this list was incomplete (no completers for 3 of the 4 trades). Therefore, only one trade (industrial electrician) was kept on the NAS frame from the EQ list of apprentices. Therefore, comparisons of estimates between the province of Quebec and other provinces should be avoided unless the comparison is made with similar trades.

A major source of non-sampling errors in surveys is the effect of non-response on the survey results. The extent of non-response varies from partial non-response (failure to answer just one or some questions) to total non-response. Total non-response occurred because the interviewer was either unable to contact the respondent, no member of the household was able to provide the information, or the respondent refused to participate in the survey. Total non-response was handled by adjusting the weight of individuals who responded to the survey to compensate for those who did not respond.

In most cases, partial non-response to the survey occurred when the respondent did not understand or misinterpreted a question, refused to answer a question, or could not recall the requested information. In partial and item non-response cases, donor imputation was performed for certain variables. The variables imputed were the wages and salaries related variables of the Labour Force (LF) and Most Recent Job (MR) modules.

The basis for measuring the potential size of sampling errors is the standard error of the estimates derived from survey results. Because of the large variety of estimates that can be produced from a survey, the standard error of an estimate is usually expressed relative to the estimate to which it pertains. This resulting measure, known as the coefficient of variation (CV) of an estimate, is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.